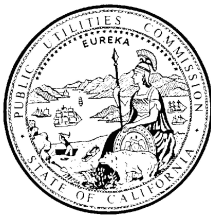


Docket:	:	<u>A.09-07-001</u>
Exhibit Number	:	<u> </u>
Commissioner	:	<u>John Bohn</u>
Admin. Law Judge	:	<u>Jeffrey O' Donnell</u>
DRA Project Mgr.	:	<u>Patrick Hoglund</u>



**DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**REPORT ON THE
RESULTS OF OPERATIONS
IN MARYSVILLE DISTRICT
OF
CALIFORNIA WATER SERVICE COMPANY
Test Year 2011 and
Escalation Years 2012 and 2013
Application 09-07-001**

For authority to increase water rates located in its
Marysville District serving City of Marysville, Yuba County.

San Francisco, California
February 10, 2010

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1 **MEMORANDUM**

2 The Division of Ratepayer Advocates (“DRA”) of the California Public
3 Utilities Commission (“Commission”) prepared this Report in California Water
4 Service Company’s (“CWS”) rate case proceeding A.09-07-001. In this docket,
5 the Applicant requests an order for authorization to increase rates charged for
6 water service by \$1,075,800 or 46.9 % in Test year 2011; by \$400,900 or 11.9% in
7 Escalation year 2012; and by \$400,900 or 10.6% in Escalation year 2013 in its
8 Marysville District service area. The applicant requests adoption of a rate of
9 return of 8.58% from D. 09-05-019. DRA presents its analysis and
10 recommendations associated with the Applicant’s request in this Report.

11 Patrick Hoglund serves as DRA’s project coordinator in this review, and is
12 responsible for the overall coordination in the preparation of this report. Appendix
13 A contains witnesses’ prepared qualifications and testimony.

14 DRA’s reports on payroll, conservation expenses and special requests are
15 included under separate Reports.

16 DRA’s Legal Counsels for this case are Selina Shek, Allison Brown, and
17 Hien Vo.

EXECUTIVE SUMMARY

CWS requests increasing rates by 46.9% in Test Year 2011 and 11.9% in Escalation Year 2012, whereas DRA recommends an increase of 13.9% in Test Year 2011 and inflationary increases for the Escalation Years. To avoid rate shock among its customers, CWS requested to phase in the increase of 46.9%, resulting in an increase of 22.0% in the Test Year and defer some of the increase in the later years.

Key Recommendations

DRA recommends that CWS' requested rate of return of 8.58% be adopted in this proceeding.

DRA's recommendations are based on lower total sales (Chapter 2), lower estimates of Operation and Maintenance expenses (Chapter 3), lower estimates of Administrative and General expenses (Chapter 4), lower Plant additions (Chapter 7) and lower Ratebase (Chapter 9).

DRA addresses its recommended treatment of CWS' 30 Special Requests ("SR") in a separate report. That report discusses Special Request #4 regarding the true up of interim rates, and Special Request #13 regarding rate deferral, or phase in of rates for the Marysville District.

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
-	Executive Summary	
1	Overview and Policy Introduction and Summary of Earnings	Patrick Hoglund
2	Water Consumption and Operating Revenues	Lisa Bilir Zachary Burt
3	Operations and Maintenance (except Payroll) Expenses	Raymond Yin
4	Administrative & General (except Payroll & Conservation) Expenses	Cleason Willis
5	Taxes Other Than Income	Jerry Oh
6	Income Taxes	Jerry Oh
7	Utility Plant in Service	Isaiah Larsen
8	Depreciation Reserve and Depreciation Expense	Isaiah Larsen
9	Ratebase N/G multiplier	Isaiah Larsen Richard Rauschmeier
10	Customer Service	Toni Canova
11	Rate Design	Lisa Bilir
12	Water Quality	Pat Ma
13	Step Rate Increase	Patrick Hoglund

1 **CHAPTER 1: OVERVIEW AND POLICY**

2 **A. INTRODUCTION**

3 This Report sets forth DRA’s analysis and recommendations for
4 A. 09-07-001, CWS’ general rate increase request for Test Year 2011 and
5 Escalation Years 2012 and 2013.

6 **B. SUMMARY OF RECOMMENDATIONS**

7 Tables 1-1 through 1-3 of the Summary of Earnings compare the results of
8 operations for Test Year 2011 including revenues, expenses, taxes and ratebase.

9 **C. DISCUSSION**

10 CWS requests the total revenues as follows (with phase-in):

11 Year Amount of Increase Percent

12 2011 \$ 504,901 22.0%

13 2012 \$1,042,600 38.2%

14 2013 \$1,042,600 27.6%

15 CWS estimates that its proposed rates in the Application will produce
16 revenues providing the following returns:

17 Year Return on Rate Base Return on Equity

18 2011 8.58% 10.2%

19 2012 8.58% 10.2%

20 2013 8.58% 10.2%

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TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	2,273.2	2,295.6	22.4	1.0%
Operating expenses:				
Operation & Maintenance	818.1	940.4	122.3	14.9%
Administrative & General	462.3	521.1	58.8	12.7%
G. O. Prorated Expense	421.3	567.8	146.5	34.8%
Dep'n & Amortization	304.0	328.8	24.8	8.2%
Taxes other than income	77.6	110.9	33.3	42.9%
State Corp. Franchise Tax	3.8	(58.3)	(62.1)	-1637.7%
Federal Income Tax	<u>51.5</u>	<u>(135.2)</u>	<u>(186.7)</u>	<u>-362.3%</u>
Total operating exp.	2,138.6	2,275.5	136.9	6.4%
Net operating revenue	134.6	20.1	(114.5)	-85.1%
Rate base	3,853.2	7,879.6	4,026.4	104.5%
1 Return on rate base	3.49%	0.25%	-3.24%	-92.7%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	2,767.4	3,371.3	603.9	21.8%
Operating expenses:				
Operation & Maintenance	819.9	944.4	124.5	15.2%
Administrative & General	462.3	521.1	58.8	12.7%
G. O. Prorated Expense	421.3	567.8	146.5	34.8%
Dep'n & Amortization	304.0	328.8	24.8	8.2%
Taxes other than income	77.6	110.9	33.3	42.9%
State Corp. Franchise Tax	47.3	36.4	(10.9)	-23.1%
Federal Income Tax	194.5	185.9	(8.6)	-4.4%
Total operating exp.	2,326.9	2,695.3	368.4	15.8%
Net operating revenue	440.5	676.0	235.5	53.5%
Rate base	3,853.2	7,879.6	4,026.4	104.5%
Return on rate base	11.43%	8.58%	-2.85%	-25.0%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
(Thousands of \$)				
Operating revenues	2,273.2	2,589.9	316.7	13.9%
Operating expenses:				
Operation & Maintenance	818.1	819.3	1.2	0.1%
Administrative & General	462.3	462.3	0.0	0.0%
G. O. Prorated Expense	421.3	421.3	0.0	0.0%
Dep'n & Amortization	304.0	304.0	0.0	0.0%
Taxes other than income	77.6	77.6	0.0	0.0%
State Corp. Franchise Tax	3.8	31.7	27.9	736.0%
Federal Income Tax	51.5	143.1	91.6	177.8%
Total operating exp.	2,138.6	2,259.3	120.7	5.6%
Net operating revenue	134.6	330.6	196.0	145.6%
Rate base	3,853.2	3,853.2	0.0	0.0%
1 Return on rate base	3.49%	8.58%	5.09%	145.6%

CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations regarding the forecasted number of customers, water sales and operating revenues for CWS' Marysville district. Marysville had an average of 3,756 service connections in 2008; the Marysville district includes the City of Marysville and vicinity, in Yuba County. DRA reviewed CWS' data responses, testimony, application, and workpapers before formulating its own estimates.

B. SUMMARY OF RECOMMENDATIONS

DRA adhered to the methods outlined in the Rate Case Plan ("RCP") in DRA's analysis of sales forecast and revenues. Whereas, CWS' sales forecast method differed from the RCP. Appendix A to Chapter 2 for DRA's Bakersfield report provides a detailed explanation of DRA's sales forecast and revenue methods. The Commission should uphold the methods outlined in the RCP by adopting DRA's recommendations presented in this report.

1) Average Active Service Connections

CWS proposes to forecast the number of customers using the five-year average change in customers by customer class for the period 2004-2008 for all customer classes other than Residential. DRA accepts CWS' forecasted number of customers for all these customer classes. For the Residential customer class, CWS proposes to add the proposed flat-to-meter conversion to the five-year average change in the number of residential customers. DRA instead adds the proposed flat-to-meter conversion to the five-year average change in the number of customers for the entire residential class, including flat and metered residential customers, to account for the previous conversions of flat-to-metered customers.

2) Metered Sales and Supply

The Commission should require CWS to use the method proposed by DRA for Residential and Business customers, in accordance with the RCP, going forward, and should also adopt DRA's estimates for metered sales and supply in this case. Table 2-1 at the end of this chapter illustrates DRA and CWS' proposed sales per average customer for each customer class. DRA uses the same general methodology as CWS to estimate multiple regression equations in accordance with the RCP and the "New Committee Method" ("NCM"). As is outlined in the NCM, rain, temperature and time are included in the regression model, where possible. The primary difference between DRA and CWS' forecasts are that CWS used the regression equations to calculate weather-adjusted recorded sales from 2008 and used this as its estimated sales for 2011. DRA used the regression equations to calculate forecasted sales for 2011 and 2012, based on the 30-year monthly average rain and temperature, in accordance with the RCP.¹

3) Operating Revenues

The Commission should adopt DRA's estimates for operating revenues. DRA uses the same method as CWS to calculate operating revenues, although DRA presents the operating revenues differently for illustrative purposes (see Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2. for the complete explanation).

4) Unaccounted for Water

CWS assumes 8% unaccounted for water in Marysville because the large number of flat rate customers makes it difficult to estimate unaccounted for water. CWS' assumption of 8% unaccounted for water is reasonable.

¹ D.07-05-062, Appendix A – Rate Case Plan and Minimum Data Requirements for Class A Water Utilities General Rate Applications, p. A-23, footnote 4, (B) "Use 30-year average for forecast values for temperature and rain"

1 **C. DISCUSSION**

2 **1) Average Active Service Connections**

3 Customer growth is the forecasted growth of a customer base in a given
4 area. CWS and DRA use customer growth to project revenues for 2011-2012.
5 The RCP, adopted in D.07-05-062 requires the number of customers to be forecast
6 using a five-year average of the change in the number of customers by customer
7 class, unless an unusual event occurs, in which case an adjustment to the five-year
8 average may be made.² Table 2-2 and 2-3 at the end of this chapter summarize
9 DRA and CWS' proposed average number of customers for each customer class in
10 2011 and 2012, respectively.

11 **a. Residential**

12 CWS forecasts average number of residential customers based upon the rate
13 that CWS proposes to convert flat rate residential customers to metered customers
14 (261 per year during 2009-2012) added to the five-year average of the change in
15 the number of customers. DRA recommends forecasting average number of
16 residential customers using CWS' proposed rate of conversion of flat rate
17 residential customers to metered customers, added to the five-year average of the
18 change in the number of residential (flat and metered) customers,³ DRA assumes
19 no new flat rate customers will be added to the flat rate residential customer class.

20 DRA's proposed method resulted in the following number of customers:

² D.07-05-062, Appendix A: RCP, p. A-23, footnote 4.

³ The RCP states that the number of customers should be forecast using a five-year average of the change in the number of customers by customer class, unless an unusual event occurs (See Decision 07-05-062, Appendix A, pg. A-23, footnote 4).

1 Table 2-a: Residential metered average number of customers

	CWS	DRA
2011	1,282	1,174
2012	1,571	1,419

2 For flat rate residential customers, CWS used end of year (“EOY”)
3 numbers of customers in the “Average number of customers” column.⁴ CWS used
4 this EOY estimate to calculate revenues. However, for all the other customer
5 classes, CWS uses the average number of customers to calculate revenues. The
6 average number of customers should be used to calculate revenues for residential
7 flat rate customers also; DRA corrected this inconsistency. These changes to the
8 calculation for forecasted number of flat-rate customers lead to the following
9 recommended number of customers:

10 Table 2-b: Residential flat rate average number of customers

	CWS	DRA
2011	1,612	1,743
2012	1,351	1,482

11 **b. Business, Multi-Family, Public Authority, Industrial, and Other**

12 For Business, Multi-family, Public Authority, Industrial, and Other
13 customer classes, CWS proposes to forecast the number of customers using the
14 five-year average of the change in the number of customers by customer class.
15 DRA agrees.

⁴ See “Marysville Exp July 2009,” WP 4-B3, cells D28-D31 and B41-E45

2) Metered Sales and Supply

Table 2-4 and 2-5 at the end of this chapter summarize DRA and CWS' proposed metered and flat rate sales for each customer class in 2011 and 2012, respectively.⁵

a. Residential metered

DRA accepts CWS' use of the modified unconstrained regression model, (including monthly temperature variables and rain but not time) with the exception of the inclusion of an auto-regressive term. However, DRA used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows the regression model that DRA and CWS chose. The following table summarizes DRA and CWS' recommendations:

Table 2-c: forecasted sales (ccf⁶/service)

	CWS	DRA	% difference
2011	183.3	190.8	4.0%
2012	180.6	190.8	5.6%

b. Business

CWS proposed using the unconstrained model with the inclusion of an autoregressive term. DRA found the statistical confidence estimated for the coefficient of some of the monthly temperature variables to be low (<90%)⁷. DRA tried the constrained model instead and found the statistical confidence estimated for the monthly temperature variables improved, but the estimated

⁵ If DRA's sales forecast combined with DRA's other recommendations leads to higher bill increases than CWS presented in its notices to customers, DRA recommends that the total bill increases should be capped at CWS' proposed levels.

⁶ 100 cubic feet

⁷ 90% is cited here because that is DRA's criteria as described in Appendix A to Chapter 2 of DRA's Bakersfield report.

statistical confidence for the rain coefficient was 83% (<90%), but in accordance with the RCP, DRA accepts the constrained model since the coefficient had the correct sign (negative) and the statistical confidence was still high.⁸ Workpaper Revenue-001 shows DRA's regression model. Table 2-d below summarizes DRA and CWS' recommendations for sales per service for Business customers:

Table 2-d: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	446.4	369.9	-17.1%
2012	439.7	359.9	-18.1%

c. Multifamily

Multifamily customers accounted for 23.45%⁹ of metered sales for the Marysville district in 2008. CWS proposes to use the unconstrained model to project sales. DRA found the statistical confidence estimated for the rain coefficient using the unconstrained model to be low (<90%). However, in accordance with the RCP, DRA accepts the unconstrained model since the coefficient had the correct sign (negative) and the statistical confidence was still high. However, DRA used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows DRA's regression model. Table 2-e below summarizes DRA and CWS' recommendations for sales per service for Multifamily customers:

Table 2-e: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	1,185.9	1,083.5	-8.6%
2012	1,168.1	1,056.4	-9.6%

⁸ Although 83% does not quite meet DRA's criteria for statistical confidence, DRA prioritized the use of a regression model in compliance with the Rate Case Plan p. A-26, footnote 8, which states that the utility and DRA shall use the "New Committee Method" to forecast per customer usage for the residential and small commercial customer classes.

⁹ Calculated from data in Table 4-C

1 **d. Industrial**

2 Industrial customers in the Marysville district accounted for 0.23% of
3 metered sales in 2008. There was a dramatic drop in sales in the middle of 2005
4 which was sustained up through the present. 2005-2008 is an insufficient time
5 period on which to build a regression model. Therefore CWS proposes using the
6 average sales for the last three years (2006-2008) to forecast future sales. DRA
7 agrees.

8 Table 2-f: forecasted sales (Kccf / Industrial customer class)¹⁰

	CWS	DRA	% difference
2011	1.7	1.7	0%
2012	1.7	1.7	0%

9 **e. Public Authority**

10 Public Authority customers in the Marysville district accounted for 24.33%
11 of metered sales in 2008. CWS recommends using the unconstrained model with
12 an autoregressive term for the Public Authority customer class. DRA found poor
13 statistical confidence for some of the monthly temperature variables under the
14 unconstrained model. Although DRA also found poor statistical confidence for
15 the rain coefficient in the constrained model, the coefficient had the correct sign.
16 DRA chose the constrained model to forecast sales. Table 2-g below compares
17 DRA and CWS' forecasted sales for the Public Authority customer class.

¹⁰ The numbers in Table 2-f differ from the numbers in Table 2-1 because Table 2-f illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

1 Table 2-g: forecasted sales (Kccf)¹¹

	CWS	DRA	% difference
2011	152.8	154.2	0.9%
2012	150.5	159.0	5.7%

2 **f. Other**

3 DRA agrees with CWS' proposed method to use the average sales of the
4 last two years for the Other customer class.

5 **3) Operating Revenue**

6 Tables 2-6 and 2-7 at the end of this chapter summarize DRA and CWS'
7 forecasted operating revenue at present rates in 2011, at CWS proposed rates in
8 2011 and at present rates in 2012, respectively. DRA removed CWS' 1.5%
9 conservation adjustment to consumption in 2012; the reasons for doing this are
10 described in Appendix A to Chapter 2 of DRA's Bakersfield report, section A. 4.

11 **a. Residential metered**

12 CWS calculates operating revenue for metered residential customers by (1)
13 taking the sum of estimated quantity revenues calculated for each meter size, for
14 each month and for each tier of the increasing block rate design based on three-
15 year average sales patterns and (2) adding this to the estimated service charge
16 revenues, calculated by taking the average number of customers each year and
17 multiplying it by the service charge. CWS' method is outlined in detail in
18 Appendix A of Chapter 2 in DRA's Bakersfield Report. DRA does not
19 recommend any changes to this method.

20

¹¹ The numbers in Table 2-g differ from the numbers in Table 2-1 because Table 2-g illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

1 **b. Residential flat rate**

2 CWS calculates operating revenue for flat rate residential customers using
3 the estimated EOY number of customers for 2011 and 2012 multiplied by the flat
4 rate, since the flat rate customers do not have tiered rates or other quantity rates.
5 However, the appropriate number of customers to use to calculate operating
6 revenues is the average number of customers, rather than the EOY number of
7 customers. The Commission should adopt DRA's operating revenues because
8 they are calculated using the average number of customers rather than the EOY
9 number of customers.

10 **c. Business, Multi-family, Public Authority, Industrial and Other**

11 CWS calculates operating revenues for business, multifamily, public
12 authority, industrial, and other customers by (1) taking the sum of estimated
13 quantity revenues for each meter size, for each month based on three-year average
14 sales patterns and (2) adding the quantity revenues to the estimated service charge
15 revenues, calculated by multiplying the forecasted average number of customers
16 by the meter charges. CWS's method is outlined in detail in Appendix A to
17 Chapter 2 of DRA's Bakersfield Report. DRA does not recommend any changes
18 to this method.

19 **4) Unaccounted for Water**

20 CWS has a significant percentage of un-metered connections in Marysville
21 and forecasts a conversion of 261 flat to metered services per year during 2009-
22 2012. Regardless of the rate of conversion, there is no question that there are a
23 substantial number of flat-rate residential customers. For this reason, an exact
24 calculation of unaccounted for water is not possible. For this general rate case,
25 CWS assumes 8% unaccounted for water. DRA agrees with CWS' methodology
26 and finds this figure reasonable.

1 **D. CONCLUSION**

2 **1) Average Active Service Connections**

3 The Commission should adopt DRA's recommended number of service
4 connections.

5 **2) Metered Sales and Supply**

6 DRA recommends adherence to the RCP and NCM for forecasting metered
7 sales and supply and recommends that the Commission adopt DRA's forecasted
8 sales estimates and require CWS to use the method proposed by DRA for
9 residential and business customers going forward.

10 **3) Operating Revenues**

11 DRA accepts CWS' method for calculating operating revenues, with the
12 following modifications for illustrative purposes: for all customer classes, DRA
13 used the present rates given by CWS at the time it filed the GRC application to
14 illustrate Operating Revenues at Present Rates for 2011 and 2012. Also, DRA
15 used the proposed rates from CWS' GRC application filed in July 2009 to
16 calculate Operating Revenues at Proposed Rates. Appendix A to Chapter 2 for
17 DRA's Bakersfield report in section B. 1. and B. 2. provides a detailed
18 explanation.

19 **4) Unaccounted for Water**

20 DRA does not oppose CWS's assumption of 8% unaccounted for water,
21 given the large portion of flat rate customers in this district.

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(CCF/CONN./YR)				
Residential	190.8	183.3	(7.5)	-4.1%
Business	369.9	446.4	76.5	17.1%
Multiple Family	1,185.9	1,185.9	0.0	0.0%
Industrial	425.0	421.8	(3.3)	0.0%
Public Authority	1,841.9	2,065.1	223.2	12.1%
Other	105.1	105.1	0.1	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Res. Flat Rate	252.6	252.6	0.1	0.0%

1

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	1,174	1,282	108	9.2%
Business	513	513	0	0.0%
Multiple Family	123	123	0	0.0%
Industrial	4	4	0	0.0%
Public Authority	74	74	0	0.0%
Other	8	8	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	1,896	2,004	108	5.7%
<u>Flat Rate Connections</u>				
Residential Flat	1,743	1,612	(131)	-7.5%
Private Fire Protection	57	57	0	0.0%
Public Fire Protection	6	6	0	0.0%
Total flat rate connections	1,806	1,675	(131)	-7.3%
<u>Total Active Connections</u>				
Include Fire Protection	3,702	3,679	(23)	-0.6%
Exclude Fire Protection	3,639	3,616	(23)	-0.6%

1

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	1,419	1,571	152	10.7%
Business	512	512	0	0.0%
Multiple Family	122	122	0	0.0%
Industrial	4	4	0	0.0%
Public Authority	74	74	0	0.0%
Other	9	9	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	2,140	2,292	152	7.1%
<u>Flat Rate Connections</u>				
Residential Flat	1,482	1,351	(131)	-8.8%
Private Fire Protection	58	58	0	0.0%
Public Fire Protection	6	6	0	0.0%
Total flat rate connections	1,546	1,415	(131)	-8.5%
<u>Total Active Connections</u>				
Include Fire Protection	3,686	3,707	21	0.6%
Exclude Fire Protection	3,622	3,643	21	0.6%

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(KCCF/YEAR)				
<u>Metered Sales</u>				
Residential	224.0	235.0	11.0	4.9%
Business	189.8	229.0	39.2	20.7%
Multiple Family	145.9	145.9	0.0	0.0%
Industrial	1.7	1.7	(0.0)	-0.8%
Public Authority	136.3	152.8	16.5	12.1%
Other	0.8	0.8	0.0	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	698.5	765.3	66.8	9.6%
<u>Flat Rate Sales</u>				
Residential	440.2	407.2	(33.0)	-7.5%
Unaccounted For Water 8.00%	99.0	102.0	3.0	3.0%
Total delivered	1,237.7	1,274.5	36.8	3.0%
<u>Supply</u>				
Company Wells	1,237.7	1,274.5	36.8	3.0%
Total production	1,237.7	1,274.5	36.8	3.0%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(KCCF/YEAR)				
<u>Metered Sales</u>				
Residential	270.8	283.7	12.9	4.8%
Business	184.3	225.1	40.8	22.2%
Multiple Family	144.7	142.5	-2.2	-1.5%
Industrial	1.7	1.7	0.0	-2.3%
Public Authority	136.3	150.5	14.2	10.4%
Other	0.8	0.8	0.0	-1.4%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	738.6	804.4	65.8	8.9%
<u>Flat Rate Sales</u>				
Residential	374.3	341.3	(33.0)	-8.8%
Unaccounted For Water 8.00%	96.8	99.6	2.8	2.9%
Total delivered	1,209.6	1,245.3	35.7	3.0%
<u>Supply</u>				
Company Wells	1,209.7	1,245.3	35.6	2.9%
Total production	1,209.7	1,245.3	35.6	2.9%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	231.5	242.9	11.4	4.9%
Business	208.9	252.1	43.2	20.7%
Multiple Family	160.6	160.6	0.0	0.0%
Industrial	1.9	1.9	0.0	0.0%
Public Authority	150.0	168.2	18.2	12.1%
Other	0.9	0.9	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	753.8	826.5	72.7	9.6%
<u>Non-WRAM Revenues</u>				
Service Charges	558.7	578.2	19.5	3.5%
Residential Flat	921.9	852.0	(69.9)	-7.6%
Private Fire Protection	25.4	25.4	0.0	0.0%
Public Fire Protection	2.6	2.6	0.0	0.0%
Other	10.8	10.8	0.0	0.0%
Total Flat Rate	1,519.4	1,469.1	-50.3	-3.3%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	2,273.2	2,295.6	22.4	1.0%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	315.0	330.5	15.5	4.9%
Business	289.6	349.5	59.9	20.7%
Multiple Family	222.6	222.6	0.0	0.0%
Industrial	2.6	2.6	0.0	0.0%
Public Authority	208.0	233.2	25.2	12.1%
Other	1.3	1.3	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	1,039.1	1,139.6	100.5	9.7%
<u>Non-WARM Revenues</u>				
Service Charges	562.0	579.9	17.9	3.2%
Residential Flat	1,124.7	1,039.4	(85.3)	-7.6%
Private Fire Protection	27.4	27.4	0.0	0.0%
Public Fire Protection	2.8	2.8	0.0	0.0%
Other	11.4	11.4	0.0	0.0%
Total Flat Rate	1728.3	1660.9	-67.4	-3.9%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	2,767.4	2,800.5	33.1	1.2%

1 CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES

2 A. INTRODUCTION

3 This Chapter presents DRA's analysis and recommendations on Operation
4 and Maintenance ("O&M") expenses in the Marysville District of California
5 Water Service Company ("CWS") for Test Year 2011. Table 3-A shows a
6 comparison of total expense estimates at present rates for Test Year.

7 **Table 3-A: Comparison of Total O&M Expense Estimates**

Test Year 2011			
Items	DRA	CWS	CWS Exceeds DRA
O&M Expenses	\$818,100	\$940,400	\$122,300 or 14.9%

8 B. SUMMARY OF RECOMMENDATIONS

9 DRA's estimate for Total O&M expenses for Test Year 2011 is \$818,100.
10 CWS' Test Year 2011's estimate is \$940,400. CWS' estimate exceeds DRA's by
11 \$122,300, or 14.9%. DRA recommends that the Commission adopts its O&M
12 expense estimates.

13 C. DISCUSSION

14 DRA conducted an independent analysis of CWS' workpapers and methods
15 of estimating O&M Expenses for Test Year 2011. CWS uses a five-year average
16 of historical expenses adjusted for inflation as the basis for projecting Test Year
17 2011 with the exception of Purchased Chemicals, Purchased Power, Postage, and
18 Transportation.

19 DRA utilizes multiple regression analyses and other methods including last
20 recorded year (2008) data adjusted for inflation and a five-year (2004-2008)

1 average of historical expenses adjusted for inflation to assess the reasonableness of
2 CWS' estimates.

3 Both DRA and CWS apply the various escalation factors, published by the
4 DRA Energy Cost of Service Branch ("ECOS"), dated May 31, 2009, to develop
5 the level of expenses. Table 3-1 summarizes DRA's recommended O&M
6 expenses and compares them to CWS' requests for Test Year 2011. Each expense
7 item listed is discussed below.

8 **1) OPERATION EXPENSES**

9 **(a) PURCHASED POWER**

10 Purchased Power is the cost of electricity from Pacific Gas and Electric
11 needed to operate a district, including the power used in pumping and delivering
12 water. Estimating Purchased Power expenses is a function of (a) the estimated
13 production and (b) the estimated cost per kilowatt hour ("KWH"), taking into
14 account the historical ratios of electricity used to the amount of water pumped.
15 Therefore, the cost of purchased power may vary with the changes in the estimates
16 of either production, cost per KWH of electricity, or a combination of both.

17 CWS generally estimates cost per KWH using one of the following two
18 methods – (1) if a linear regression analysis shows a strong relationship between
19 cost per KWH and timing, CWS uses its linear regression forecast methodology of
20 cost per KWH based on a two-year 12-month rolling average of actual cost per
21 KWH for estimating Purchased Power expenses; otherwise, (2) CWS uses a
22 two-year average of 12-month rolling averages of actual cost per KWH in
23 estimating Purchased Power expenses.

24 Based on DRA's review of CWS' supporting workpapers, CWS' cost per
25 KWH of \$16.2849 is based on two year (2004-2005) 12-month rolling averages
26 forecast methodology. CWS overstated the cost per KWH 100 times but corrected
27 the formula in subsequent calculation of Purchased Power costs in its workpapers.

1 DRA does not accept CWS' cost per KWH used in calculating Purchased
2 Power costs because CWS' regression analysis on the historical data (i.e., two year
3 12-month rolling averages from 2004 through 2005) resulted in a R^2 of only
4 0.4798, which is not representative enough of the historical trend. Instead, DRA
5 computed the cost per KWH to be \$0.15390 using the two year average of a
6 12-month rolling averages methodology.

7 CWS' estimate of Purchased Power expense is \$165,100 in Test Year 2011.
8 DRA's estimate of Purchased Power expenses is \$150,600, which is \$14,500 less
9 than CWS' estimate. The difference between DRA and CWS estimates is due to
10 differences in water production estimates as well as on the cost per KWH
11 estimates. DRA recommends that the Commission adopt its estimate.

12 (b) PURCHASED CHEMICALS

13 CWS' estimate of Purchased Chemicals expenses is \$17,100 in Test Year
14 2011 based on a three-year (2006-2008) average cost per unit of production
15 adjusted for inflation and the estimated production. DRA's estimate of Purchased
16 Chemicals expenses is \$15,400 in Test Year based on a five-year average cost per
17 unit of production adjusted for inflation and the DRA estimated water production.
18 Using a five-year average would better reflect CWS' historical trends. Difference
19 between DRA and CWS estimates is due to differences in estimating average cost
20 per unit as well as in the estimated water production. DRA recommends that the
21 Commission adopt its estimate.

22 (c) OPERATION PAYROLL

23 For Operation Payroll expenses please refer to the Payroll Report.

24 (d) POSTAGE

25 CWS' estimate for Postage expenses is \$16,100 in Test Year 2011. CWS'
26 postage cost is a function of (a) the 2008's unit cost per customer service or
27 connection, (b) the estimated numbers of connection, and (c) a 4.8% increase in

1 postal first-class rate that was effective May 11, 2009¹², plus inflation. DRA
2 adjusts CWS' estimate by (1) reducing the postal rate increase from 4.80% to
3 3.17% in May 11, 2009, and (2) excluding the escalation factors from DRA's
4 postage expense estimate. Since CWS primarily utilizes bulk rates (Classes A5,
5 A6, A7, and A8) for its mailings, DRA computed the average bulk rate increase
6 based on reviewing the bulk rates schedule. DRA concludes the average bulk rate
7 increase is 3.17%, which is what DRA uses in its estimates. Also, as future postal
8 rate increases are unknown, an escalation factor should not be excluded from the
9 calculation. DRA determines the estimated Postage expenses to be \$15,200 for
10 Test Year 2011, which is \$900 less than CWS' estimate. DRA recommends that
11 the Commission adopt its estimate.

12 (e) OPERATION TRANSPORTATION

13 According to last year's recorded data ratios, total Transportation expense
14 includes three components: Operation, Maintenance, and Administration and
15 General ("A&G").

16 CWS' estimate for total Transportation expense is \$50,600 in Test Year
17 2011 based on the last recorded year (2008) adjusted for inflation. The total is
18 broken down as \$38,500, \$12,100, and \$0 for Operation, Maintenance, and A&G,
19 respectively. CWS' estimated total Transportation expenses include \$7,000 costs
20 associated with one additional vehicle requested by CWS in the year 2010.

21 DRA's estimate for total Transportation expense is \$43,500 in Test Year
22 2011 based on the last recorded year (2008) adjusted for inflation. The total is
23 broken down as \$33,100, \$10,400, and \$0 for Operation, Maintenance, and A&G,
24 respectively. DRA excluded the costs associated with one additional vehicle
25 requested by CWS in the year 2010 based on the recommendation by DRA payroll

¹² According to CWS' General Report, dated July 1, 2009, p25, 'District Postage'

1 witness that no additional new employees be allowed. Please refer to the Payroll
2 Report for details. DRA recommends that the Commission adopt its estimate.

3 **(f) UNCOLLECTIBLES**

4 An estimate of Uncollectible expenses is a function of (a) the estimated
5 total revenue and (b) a five-year average (when appropriate) of historical
6 uncollectible rates. DRA agrees with CWS' methodology in estimating
7 Uncollectible expenses. CWS' estimate for Uncollectible expenses is \$8,600 in
8 Test Year 2011 based on a five-year (2004-2008) average of uncollectible rate of
9 0.29777%. DRA's estimate for uncollectible expenses is \$8,500, resulting in \$100
10 less than CWS' estimate. The difference in estimated Uncollectible expenses
11 between DRA and CWS is due to the differences in estimated revenue. DRA
12 recommends that the Commission adopt its estimate.

13 **(g) SOURCE OF SUPPLY**

14 CWS' estimate of Source of Supply expenses is \$500 in Test Year 2011
15 based on a five-year (2004 to 2008) average adjusted for inflation. DRA
16 concludes that CWS' methodology and estimate are reasonable, and therefore
17 recommends that the Commission adopt CWS' estimate.

18 **(h) PUMPING EXPENSES**

19 Pumping expenses include the expenses of waste oil disposal, inspection of
20 storage tanks related to pumping, testing and cleaning pumps and motors including
21 supplies such as lubricants, fuses, gaskets, charts and the like, and power used for
22 pumping.¹³ CWS' estimate of Pumping expenses is \$8,800 in Test Year 2011
23 based on a five-year average adjusted for inflation. DRA's estimate of Pumping
24 expenses is \$7,000 using the same methodology as CWS'. The difference
25 between DRA's and CWS' estimates is due to DRA's removal of \$8,100

¹³ Per CWS' response to DRA data request, RYY-005, Question 5, dated October 19, 2009.

landscaping costs booked in General Ledger account # 724000 from the 2007 recorded Pumping expenses as one-time only item. The reasons for DRA's removal are that (1) the 2007 recorded Pumping expenses is unusually higher than other recorded years (i.e., 2004 to 2006, and 2008); (2) no similar landscaping expenses were recorded in other recorded years (i.e., 2004 to 2006, and 2008); and (3) the \$8,100 landscaping costs do not fit the definition of Pumping expenses which was described from CWS' response to DRA data request, RYY-005, Question 5, dated October 9, 2009. Therefore, DRA recommends that the Commission adopt its estimate.

(i) WATER TREATMENT

Water Treatment expenses include expenses for operating filter and treatment plants, chlorinating equipment, outside laboratory expenses, laboratory supplies, postage on water samples, water quality notices and advertisements, accrual for DPH fees including system inspections, water treatment operators' tests and certification costs, hazardous material disposal, and environmental handling and reporting.

CWS' estimate of Water Treatment expenses is \$45,400 in Test Year 2011 based on the five-year (2004-2008) average adjusted for inflation. DRA's estimate of Water Treatment expenses is \$38,300 using the same methodology. The difference between DRA's and CWS' estimates is due to DRA's removal of \$34,200 "2009 discharge fees" which was incorrectly booked in 2008 general ledger account # 742000. For accrual basis of accounting, such costs should have been booked in general ledger for the year 2009. For purpose of properly estimate the Water Treatment expenses, DRA excludes the \$34,200 discharge fees from the 2008 recorded Water Treatment expenses. DRA recommends that the Commission adopt its estimate.

1 **(j) TRANSMISSION AND DISTRIBUTION**

2 Transmission and Distribution (“T&D”) expenses include expenses
3 incurred in operating distribution reservoirs and tanks, including cleaning and
4 flushing, care of grounds, flushing of mains and services, potholing (digging to
5 verify depth and location of pipelines), corrosion tests, fire flow tests, locating and
6 operating valves and supplies necessary to operate the District’s transmission and
7 distribution system. For T&D expenses, CWS’ estimate is \$11,800 in Test Year
8 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA
9 concludes that CWS’ methodology and estimate are reasonable, and therefore
10 recommends that the Commission adopt CWS’ estimate.

11 **(k) CUSTOMER ACCOUNTING**

12 Customer Accounting expenses include all costs related to customer billing
13 such as bill stock, envelopes, billing inserts (except for conservation), fees paid to
14 collection agencies and pay stations, bank charges, alarm systems, telephone
15 charges including meter reading communication lines, janitorial services for the
16 commercial office, and other expenses related to billing customers. For Customer
17 Accounting expenses, CWS’ estimate is \$46,000 for Test Year 2011 based on a
18 five-year average adjusted for inflation. DRA estimated Customer Accounting
19 expenses to be \$45,100 using the same methodology. The difference between
20 DRA’s and CWS’ estimates is due to DRA’s removal of \$4,016 one-time only
21 “temporary labor costs” booked in 2006 recorded Customer Accounting expenses.
22 CWS acknowledges the \$4,016 as “temporary labor costs” in its response to DRA
23 data request, RYY-005, Attachment 5, Question 7, dated October 19, 2009. DRA
24 recommends that the Commission adopt its estimate.

25 **(l) CONSERVATION EXPENSES**

26 For Conservation Expenses, please refer to the Conservation Expenses
27 report.

1 **2) MAINTENANCE EXPENSES**

2 **(a) MAINTENANCE PAYROLL**

3 For Maintenance Payroll Expenses, please refer to the Payroll report.

4 **(b) MAINTENANCE TRANSPORTATION**

5 For an estimate of Maintenance Transportation expense, please refer to
6 Section (e) of this Chapter.

7 **(c) STORES**

8 CWS' estimate for Stores expenses is \$4,800 in Test Year 2011 based on a
9 five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS'
10 methodology and estimate are reasonable, and therefore recommends that the
11 Commission adopt CWS' estimate.

12 **(d) CONTRACTED MAINTENANCE**

13 CWS' estimate for Contracted Maintenance expenses is \$77,900 in Test
14 Year 2011 based on a five-year (2004-2008) average adjusted for inflation. CWS
15 included one-third of the 2010 well rehabilitation costs of \$125,000, adjusted for
16 inflation, for Station 14-01 in the 2011 estimated Contracted Maintenance
17 expenses. DRA concludes that CWS' methodology and estimate are reasonable,
18 and therefore recommends that the Commission adopt CWS' estimate.

19 **D. CONCLUSION**

20 DRA recommends that the Commission adopt its O&M expense estimates.

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

OPERATION & MAINTENANCE EXPENSES

TEST YEAR		2011		CWS exceeds DRA	
Item	DRA	CWS	Amount	%	
	(Thousands of \$)				
At present rates					
Operating Revenues	2,273.2	2,295.6			
Uncollectible rate	<u>0.37349%</u>	<u>0.37349%</u>			
Uncollectibles	8.5	8.6	0.1	1.0%	
<u>Operation Expenses</u>					
Purchased Water	0.0	0.0	0.0	0.0%	
Replenishment Assessment	0.0	0.0	0.0	0.0%	
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%	
Purchased Power	150.6	165.1	14.5	9.6%	
Purchased Chemicals	15.4	17.1	1.7	11.0%	
Payroll	310.4	368.4	58.0	18.7%	
Postage	15.2	16.1	0.9	5.9%	
Transportation	33.1	38.5	5.4	16.3%	
Uncollectibles	8.5	8.6	0.1	1.0%	
Source of Supply	0.5	0.5	0.0	0.0%	
Pumping	7.0	8.8	1.8	25.7%	
Water Treatment	38.3	45.4	7.1	18.5%	
Transmission & Distribution	11.8	11.8	0.0	0.0%	
Customer Accounting	45.1	46.0	0.9	2.0%	
Conservation	<u>21.8</u>	<u>39.4</u>	<u>17.6</u>	<u>80.7%</u>	
Total Operation Expenses	657.7	765.7	108.0	16.4%	
<u>Maintenance Expenses</u>					
Payroll	67.3	79.9	12.6	18.7%	
Transportation	10.4	12.1	1.7	16.3%	
Stores	4.8	4.8	0.0	0.0%	
Contracted Maintenance	<u>77.9</u>	<u>77.9</u>	<u>0.0</u>	<u>0.0%</u>	
Total Maintenance Expense	160.4	174.7	14.3	8.9%	
Total O & M Expenses (incl uncoll)	818.1	940.4	122.3	14.9%	
<u>At proposed rates</u>					
Operating Revenues	2,767.4	3,371.3			
Uncollectible rate	<u>0.37349%</u>	<u>0.37349%</u>			
Uncollectibles	<u>10.3</u>	<u>12.6</u>			
Total O & M Expenses (incl uncoll)	819.9	944.4	124.5	15.2%	

1 **CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES**

2 **A. INTRODUCTION**

3 This Chapter presents DRA’s recommended expense levels for California
4 Water Service Company’s (“CWS”) 2011 Test Year Administrative and General
5 (“A&G”) expenses for the Marysville District.

6 The categories of A&G expenses cover general expenses including Payroll,
7 Transportation Expenses, Rent, Administration Charges Transfer, Workers’
8 Compensation, Nonspecific Expenses, Amortization of Limited Term Investments
9 and Dues and Donations Adjustment. Table 4-1 presents a comparison of total
10 expense estimates for Test Year 2011.

11 DRA analyzed CWS’ exhibits, supporting workpapers, CWS’ responses to
12 DRA’s data requests, information provided in meetings, phone conversations, e-
13 mails, and CWS’ methods of estimating A&G expenses.

14 **B. SUMMARY OF RECOMMENDATIONS**

15 DRA’s estimated total for A&G expenses is \$462,300 for Test Year 2011.
16 CWS’ estimate for the same time period is \$521,200. CWS’ estimate exceeds
17 DRA’s estimate by \$58,800, or 12.7%. DRA’s estimated total for A&G expenses
18 is \$466,900 for Test Year 2012. CWS’ estimate for the same time period is
19 \$534,500. CWS’ estimate exceeds DRA’s estimate by \$67,600 or 14.5%. The
20 difference between the forecasted expense levels of DRA and CWS is the result
21 of: 1) DRA’s 2011 Test Year estimates of the various A&G activity expenses; 2)
22 account by account adjustments; 3) different methodologies; and 4) the use of the
23 May 2009 Energy Cost of Service Branch escalation factors memo to derive the
24 estimates as discussed below.

C. DISCUSSION

1) Methodology

DRA conducted an independent analysis of CWS' workpapers and methods of estimating the A&G expenses. DRA analyzed CWS' application and exhibits, supporting workpapers, CWS' data request responses, information provided in meetings, field trips to CWS site locations, telephone conversations and e-mails. In general, DRA uses a five-year (2004-2008) average to derive its A&G expense estimates where it had differences with CWS. DRA also removes unusual expenses recorded in certain years to arrive at a different total than CWS, in particular for Nonspecific Expenses. DRA applies its escalation factors to all A&G accounts.

2) Payroll

For A&G payroll expense, please refer to DRA's Payroll Report.

3) Employee Benefits

There were no methodical differences between DRA and CWS in calculating employee benefits. DRA's estimates for the accounts below are based on (1) total payroll dollars, and (2) total number of employees. CWS' estimates are also a function of these two factors. Per employee unit benefit costs were developed by Milliman¹⁴ and are based on a variety of actuarial assumptions. The underlying assumptions, except for the escalation factors, were accepted by DRA. Any differences are, therefore, attributable to different escalation factors and differing estimates for total company payroll and total General Office and district employees for 2011 and 2012.

DRA recommends the following amounts (thousands of dollars) for Account 795, Pensions and Benefits:

¹⁴ Milliman is CWS' Pensions and Benefits actuarial consultants.

	<u>DRA</u>		<u>CWS</u>	
	<u>2011</u>	<u>2012</u>	<u>2011</u>	<u>2012</u>
Total Account 795	\$322.2	\$324.0	\$354.2	\$359.8

4

5 All company benefits are accounted for in general operations and allocated
6 to each of the districts using the four-factor method of allocation. In general
7 benefit costs are a function of employee payroll dollars, and/or the number of
8 employees. The following is a breakdown of the sub-accounts included in the
9 total Account 795 Pensions and Benefits:

10 (a) **Account 7951-1 Retirement Savings Plan.**

11 CWS provides employees with a 401(k) program and matches 50% of
12 employee contributions up to 8% of payroll or the statutory contribution limit,
13 whichever is less. Therefore, CWS' maximum contribution is 4% of company
14 payroll. However, not all employees participate in the program. Based on actual
15 participation levels, CWS' matching contribution during the last five years, was
16 approximately 3%. This rate was used by CWS to forecast the test year amount,
17 and is in line (or comparable) to those offered by other California utilities.¹⁵

18 DRA estimated the test year contribution based on the five-year average
19 contribution percentage of 3%, which was multiplied by DRA's estimate of total
20 company payroll (in 2011 and 2012).

21 (b) **Account 7951-2 Retirement Fund.**

22 CWS' pension funding estimate is based on an actuarial forecast from
23 Milliman. The Milliman analysis also reflects a unit cost per employee which

¹⁵ The 3% rate is in line with the 401(k) plans offered by San Jose Water, PG&E, Southern California Edison, and Semptra Energy. See the Milliman analysis, CWS General Report, Tab 12.

1 DRA and CWS applied to the estimated number of employees to arrive at the test
2 year's estimate. DRA and CWS' estimates differ because of different escalation
3 factors and different estimates for total employees in the General Office and all
4 districts.

5 The Milliman forecast is based on certain assumptions such as population
6 growth, payroll changes, and salary adjustments. The Milliman forecast also
7 assumes a long term rate on plan assets of 6.75%, and a discount rate of 5.75% for
8 the years 2011 through 2013. CWS follows FASB¹⁶ Statement of Financial
9 Accounting Standards (SFAS) No. 87, as modified by SFAS 132 and SFAS 158.¹⁷
10 CWS has followed SFAS 87 since it became effective in 1987. Prior to 1987,
11 CWS pension costs equaled the cash contributions to the pension plan determined
12 in accordance with ERISA.¹⁸ The test year projections are based on Milliman's
13 actuarial valuation as of January 1, 2009 for determining the Net Periodic Benefit
14 Cost under SFAS 87. The underlying pension costs assumptions were accepted by
15 DRA.

16 DRA was persuaded that CWS had taken appropriate steps to mitigate the
17 ratepayer impact of Plan costs. Further, CWS undertook the following measures
18 to avail itself of the benefits provided under (a) The Pension Protection Act of
19 2006, (PPA) and (b) The Worker, Retiree and Employer Recovery Act (WRERA)
20 of 2008.¹⁹

21 (i) CWS fully complied with PPA and WRERA. CWS
22 modified the actuarial cost method for purposes of determining the minimum

¹⁶ Financial Accounting Standards Board.

¹⁷ CWS' response to DRA Data Request JRC-2, Q.7.

¹⁸ Employment Retirement Income Security Act, or Federal law.

¹⁹ CWS' response to DRA Data Request JRC-2, Q.1.

1 funding requirement to the Unit Credit method. CWS also adopted the use of the
2 “3-segment” interest rates (for the 2008 minimum funding requirement) and the
3 “full yield curve” (for the 2009 minimum funding requirement). The actuarial
4 valuations for 2008 and 2009 have shown that the contributions by CWS will
5 satisfy the minimum funding requirements as modified by PPA and WRERA.

6 (ii) In December 2008, CWS made an election to
7 voluntarily reduce its carryover balance (i.e., pre-PPA credit balance) of
8 \$1,537,616 as of January 1, 2008 to \$0, so that such amount could be included in
9 its plan assets. This was done in order to improve the plan’s funded percentages
10 under PPA. In 2009, CWS elected to use the “full yield curve” to determine the
11 funding target under PPA. This increased the plan’s funded percentage for 2009.

12 (c) **Account 7952- Group Health Insurance.**

13 CWS administers its own (self-insured) employee health care plan. The
14 cost of health insurance is based on actual claims experience and not outside
15 premium payments. The plans include Medical, Dental and Vision care. Further,
16 the plans are on the PPO model where employees are encouraged to use network
17 health care providers in order to minimize costs. CWS’ estimate is based on an
18 actuarial forecast from Milliman and includes employee contributions of \$125 per
19 month. The Milliman forecast assumes that overall medical cost inflation will
20 continue to be 10% annually for the forecast period.²⁰ The Milliman analysis also
21 reflects a unit cost per employee which DRA and CWS applied to the estimated
22 number of employees. DRA and CWS’ estimate differs because of different
23 escalation factors and different estimates for total employees in the General Office
24 and all districts. The underlying forecast assumptions were accepted by DRA.

²⁰ Dental and Vision care inflation is forecasted at 5% each for 2011 through 2013.

1 **(d) Account 7952-1 Retiree Group Health Insurance.**

2 CWS administers its own (self-insured) retiree health care plan. Therefore,
3 costs for these plans are based on claims experience, not outside premium
4 payments. The plans are on the PPO model, where employees are encouraged to
5 use network providers in order to minimize costs. Further, retirees pay a monthly
6 premium of \$300 per person (a retiree and spouse pay \$600 per month). This rate
7 decreases to \$144 per person when there is other coverage such as Medicare.

8 The retiree plan is funded in advance in accordance with SFAS 106, which
9 requires annual funding of the plan be based on an actuarial analysis of the
10 expected future expense arising during the employee service time. CWS' estimate
11 is based on an actuarial forecast from Milliman. The Milliman forecast assumes
12 that overall medical cost inflation will continue to be 10% annually for the
13 forecast period. The Milliman analysis also reflects a unit cost per employee
14 which DRA and CWS applied to the estimated number of employees. DRA and
15 CWS' estimate differs because of different escalation factors and estimates for
16 total employees in the General Office and all districts. The underlying forecast
17 assumptions, except for the escalation factors, were accepted by DRA.

18 **4) Transportation Expense**

19 DRA addresses Transportation Expense in Chapter 3, Operations and
20 Maintenance Expenses, of this Report. There are no A&G expenses for this
21 district.

1 **5) Rent**

2 CWS' estimates rental expense of \$20,100 for Test Year 2011 and \$20,600
3 for 2012.²¹ DRA has verified the information regarding the company's rental
4 expense, and recommends adoption of this estimate for CWS' Rent expense.

5 **6) Administration Charges Transfer**

6 Administration Charges Transfer represents credits for unregulated activity.
7 CWS' estimate of \$(3,000) for Test Year 2011, and \$(3,000) for Test Year 2012,
8 for Administration Charges Transferred based upon the last recorded year.²² DRA
9 reviewed CWS' workpapers and recommends adoption of these estimates for
10 Administration Charges Transferred.

11 **7) Workers Compensation**

12 CWS' estimates of \$21,800 in Test Year 2011, and \$24,000 in 2012 for
13 Workers Compensation is based on actuarial expectations conducted by actuaries
14 at Milliman USA ("Milliman"). An assumption embedded in the estimate is a
15 provision to account for Workers' Compensation including expected future
16 payments from current employment.²³ In other words, instead of basing the costs
17 on the well-established "pay-as-you-go methodology" that the Commission has
18 consistently utilized, CWS proposes changing to an accrual basis and including the
19 amortization of past liabilities for which payments have not yet been made.

20 In the prior rate case, CWS requested the same methodology change. DRA
21 disagreed and calculated a percentage reduction at the General Office level based
22 on the 2002-2006 average for the prior Test Year 2008-2009. The Commission

²¹ Refer to Report on the Results of Operation and Prepared Testimony for the Marysville District, Chapter 6.

²² Refer to CWS' Formal Application Workpapers for the Marysville District, Table 6-B.

²³ Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

1 similarly applied DRA's recommended reduction to all the districts in that case.
2 In Decision 08-07-008 (pages 25-26, Section 4.7 on Workers' Compensation), the
3 Commission upheld the use of the "pay-as-you-go methodology" for accounting
4 for Workers' Compensation insurance costs.

5 For the current rate case, DRA continues to disagree with CWS' proposed
6 change in recovery methodology and recommends continuing the "pay-as-you-go
7 methodology" for recovering this cost. To put in perspective CWS' current
8 proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus
9 General Office, CWS' total proposed Workers' Compensation is \$2,747,250. This
10 amount is almost triple the total 2008 recorded amount of \$992,800 and about
11 70% higher than the 2004-2008 five-year average (in 2009 dollars) of \$1,643,900.

12 DRA reviewed the recorded amounts for Workers' Compensation for this
13 District. DRA finds the recorded amounts for 2004 to 2008 more reflective of the
14 "pay-as-you-go methodology" for accounting for Workers Compensation that the
15 Commission approved in D. 08-07-008. DRA then took a five-year average of
16 these recorded amounts and escalated the five-year average using DRA's labor
17 escalation factors to derive its Test Year 2011 and 2012 forecast of \$18,800, for
18 both years respectively, for the Marysville District.

19 DRA recommends adapting its estimate of \$18,800 for Workers
20 Compensation for the Test Year's for this District.

21 **8) Nonspecific Expenses**

22 Nonspecific Expenses generally represent miscellaneous administrative and
23 general expenditures. The Nonspecific Expenses account contains various sub-
24 accounts. However, CWS does not provide estimated amounts for each sub-
25 account for future years. Instead, it provides a compound figure for Nonspecific
26 Expenses that are based on historical spending levels in all sub-accounts. CWS'

1 Nonspecific Expenses estimates for Test Year 2011 and 2012 of \$23,500, and
2 \$24,100 respectively are based on a five-year average. DRA reviewed all sub
3 accounts within Nonspecific expenses and adjusted some amounts for the years
4 2004 through 2008 under the following subaccounts: Account 792501 – Office
5 Supplies by \$4,115, Account 792600 – Travel & Incidental Expense by \$25,562,
6 Account 792601 – Travel Meals Expense by \$10,055, Account 799500 –
7 Miscellaneous Expense by \$4,178. DRA then escalated its five-year average
8 using DRA’s composite escalation factors to derive its 2011 forecast. DRA
9 recommends adopting its Nonspecific Expenses estimate of \$14,700 and \$15,100
10 for 2011 and 2012, forecast respectively. CWS’ Nonspecific forecast of \$23,500
11 and \$24,100 exceeds DRA’s by \$8,800, and \$9,000, or 59.9%, and 59.6%,
12 respectively for 2011 and 2012. DRA’s reasons for these adjustments are
13 described below:

14 (a) Account 792501 - Office Supplies Expense

15 DRA identified sizable expenditures in 2006 for job listings; this charge
16 looked out of place in Office supplies. DRA believes that these expenditures are
17 of no benefit to ratepayers, and removes them from DRA’s estimate. DRA used a
18 five-year average of recorded years 2004 to 2008 with the cost of the previously
19 mentioned items removed.

20 (b) Account 792600 – Travel & Incidental Expenses

21 DRA identified large expenditures in 2004 through 2008 that included
22 apartment rentals, and PG&E bills. DRA believes that these expenditure’s are of
23 no benefit to ratepayers, and removes them from DRA’s estimate. DRA used a
24 five-year average of recorded years 2004 to 2008 with the cost of the previously
25 mentioned items removed.

1 (c) Account 792601 – Travel Meals Expense

2 DRA identified questionable expenditures for moving expenses in 2003 -
3 2008 for an employee. DRA believes that the previously mentioned expenditures
4 are of no benefit to ratepayers and removes them from DRA's estimate. DRA
5 used a five-year average of recorded years 2004 to 2008 with the cost of the
6 previously mentioned items removed.

7 (d) Account 799500 – Miscellaneous General Expenses

8 DRA identified expenditures in this account from 2004 through 2008 for a
9 Halloween fair, Employee Celeb Day / Prizes, Retirement Gifts, and Retirement
10 Dinners. DRA believes that the previously mentioned expenditures were of no
11 benefit to ratepayers, and removes them from DRA's estimate. DRA used a five-
12 year average of recorded years 2004 to 2008 with the cost of the previously
13 mentioned items removed.

14 **9) Amortization of Limited Term Investment**

15 This expense pertains to the amortization of an intangible assets, such as
16 capital planning studies. CWS estimates \$10,100 for Amortization of Limited
17 Term Investment. CWS bases its estimate from the general method for this
18 expense shown on CWS' amortization schedule. DRA reviewed this account and
19 recommends adoption of CWS' Amortization of Limited Term Investment
20 estimate.

21 **10) Dues and Donations Adjustment**

22 The Dues and Donations Adjustment represents CWS' adjustment of non-
23 professional dues paid historically, for ratemaking purposes. CWS' estimate for
24 Dues and Donations Adjustment is (\$1,200). DRA has reviewed CWS'
25 workpapers and recommends adoption of CWS' Dues and Donations Adjustment
26 estimate.

1 **D. CONCLUSION**

2 DRA recommends that the Commission adopt DRA's A&G Expenses for
3 the Marysville District.

4

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
At present rates				
Oper. Rev. less uncoll.	2,264.7	2,287.0		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	80.6	95.6	15.0	18.6%
Benefits	322.2	354.2	32.0	9.9%
Transportation Expenses	0.0	0.0	0.0	0.0%
Rent	20.1	20.1	0.0	0.0%
Admin Charges Trsf	(3.0)	(3.0)	0.0	0.0%
Worker's Compensation	18.8	21.8	3.0	16.0%
Nonspecifics	14.7	23.5	8.8	59.9%
Amort of Limited Term Inv.	10.1	10.1	0.0	0.0%
Dues & Donations Adjustment	(1.2)	(1.2)	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	462.3 462.3	521.1 521.1	58.8 58.8	12.7% 12.7%
At proposed rates				
Oper. Rev. less uncoll.	2,757.1	3,358.7		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	462.3 462.3	521.1 521.1	58.8 58.8	12.7% 12.7%

1 **CHAPTER 5: TAXES OTHER THAN INCOME**

2 **A. INTRODUCTION**

3 This chapter presents DRA’s analysis and recommendations on Taxes Other
4 Than Income for the Marysville District of California Water Service’s (CWS) Test
5 Year 2011 General Rate Case. The category of Taxes Other Than Income is
6 comprised of ad valorem (property taxes), business license fees, local franchise
7 fees, and payroll taxes.

8 **B. SUMMARY OF RECOMMENDATIONS**

9 Differences between CWS’ and DRA’s estimates for Taxes Other Than
10 Income are primarily due to differences in revenue, plant and payroll estimates.
11 The methodologies used by CWS in estimating future taxes and fees are detailed
12 below. Anywhere DRA has made adjustments to improve the consistency or
13 accuracy of estimates has also been noted below.

14 **C. DISCUSSION**

15 **1) AD VALOREM TAXES**

16 CWS estimates future ad valorem taxes using the actual ad valorem tax
17 percentage from the last recorded year. This percentage is applied to the following
18 year’s estimated net total of utility property accounts.²⁴ The pro-forma ad
19 valorem estimate is the arithmetic average of the two years. DRA accepts this
20 methodology and notes that differences between CWS and DRA estimates are due
21 to differences in estimations of future plant.

²⁴ Net Total of Property = plant + materials & supplies + construction work in progress + present value of advances – advances & contributions – deferred income tax

1 **2) BUSINESS LICENSE and LOCAL FRANCHISE FEES**

2 The Marysville District pays a fixed business license fee of \$626 in the City of
3 Marysville. The Marysville District does not pay franchise fee. DRA accepts the
4 CWS' estimates for the business license fee.

5 **3) PAYROLL TAXES**

6 CWS estimates future payroll taxes using projected payroll amounts and the
7 effective tax rates from the last recorded year. The three components of payroll
8 taxes are Federal Insurance Contributions (FICA), Federal Unemployment
9 Insurance (FUI) and State Unemployment Insurance (SUI). All three components
10 have statutory limits governing the maximum percentage that can be collected
11 from employers (*see table, below*).

PAYROLL TAXES		2009 MAXIMUM	EXPLANATORY NOTES
FICA	Social Security Tax	6.2%	Social Security Tax is 6.2% applied to only the first \$106,800 of an employee's salary.
	Medicare Tax	1.45%	
FUI Tax		0.8%	Federal Unemployment Tax is 6.2% reduced by an offset credit of up to 5.4% for a total of 0.8% on the first \$7,000 of employee wages (\$56 per employee).
SUI Tax (CA)		6.3%	State Unemployment Taxes vary by company from 1.5% to 6.2% plus an Employment Training Tax Rate of 0.1% for a maximum tax percentage of 6.3%.

12 In general, DRA accepts the methodology utilized by CWS to estimate future
13 payroll taxes. An adjustment was made by DRA to the imputed FICA percentage
14 used by CWS for the Marysville District (8.00%) to coincide with the maximum
15 tax (7.65%) that can be collected for the combined Social Security and Medicare
16 Taxes (see table above). All other differences between DRA and CWS estimates
17 result from differences in estimates of future payroll.

1 **D. CONCLUSION**

2 DRA recommends Commission adoption of DRA's estimates of Taxes Other
3 Than Income that are presented in Tables 5-1.

TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Ad Valorem taxes	39.9	64.3	24.4	61.2%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (CWS prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	37.1	46.0	8.9	24.0%
Business License (pres rates)	0.6	0.6	0.0	0.0%
Business License (CWS prop rates)	0.6	0.6	0.0	0.0%
Taxes other than income (present rates)	77.6	110.9	33.3	42.9%
Taxes other than income (CWS proposed rates)	77.6	110.9	33.3	42.9%
State Tax Depreciation	395.5	643.7	248.2	62.8%
Transp. Dep. Adj.	(10.0)	(12.4)	(2.4)	24.0%
State Tax Deduct(pres rates)	385.5	631.3	245.8	63.8%
State Tax Deduct (CWS prop rates)	385.5	631.3	245.8	63.8%
Fed. Tax Depreciation (pres rates)	269.3	438.4	169.1	62.8%
State Income Tax (pres. rates)	3.8	(58.3)	(62.1)	-1637.7%
State Income Tax (CWS prop rates)	47.3	36.4	(10.9)	-23.1%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	(14.9)	37.9	52.8	-354.9%
DPAD (CWS prop. Rates)	(55.3)	(52.5)	2.8	-5.0%
Fed. Tax Deduct.(pres rates)	258.3	418.0	159.8	61.9%
Fed. Tax Deduct (CWS prop rates)	261.4	422.3	160.9	61.6%

1 **CHAPTER 6: INCOME TAXES**

2 **A. INTRODUCTION**

3 This chapter presents DRA’s analysis and recommendations on Income Taxes
4 for the Marysville District of California Water Service (CWS) Test Year 2011
5 General Rate Case. In developing its recommendations, DRA reviewed the
6 reports, workpapers, and data responses of CWS in conjunction with information
7 obtained from the California Franchise Tax Board and the Internal Revenue
8 Service.

9 **B. SUMMARY OF RECOMMENDATIONS**

10 The majority of the differences between CWS and DRA estimates of Income
11 Taxes are attributable to differences in estimated revenue, expenses, and rate base.
12 Anywhere DRA has made adjustments to the estimating methodology used by
13 CWS is detailed below. The three areas in which DRA made adjustments to CWS
14 calculations for Marysville pertain to the: (1) federal deduction of the California
15 Corporate Franchise Tax, (2) California Corporate Franchise Tax total percentage,
16 and (3) calculation of the interest expense deduction.

17 **C. DISCUSSION**

18 **1) DRA ADJUSTMENTS**

19 (a) Federal Deduction of California Corporate Franchise Tax (CCFT)

20 D.89-11-058, issued in November of 1989, required that the prior year’s CCFT
21 be used as the deduction for calculation of test year federal income taxes. As
22 discussed throughout the decision, companies at that time were required to pay
23 estimated California taxes one year in advance.²⁵ D.89-11-058 corrected the

²⁵ California Revenue and Taxation Code, Part 11, Chapter 2, Article 2, Section 23151(f)(2)

1 timing difference between when companies had previously paid California taxes
2 and when they had realized such payment as a deduction for federal income taxes.

3 Since 1989, the California Tax Code has changed so that corporations are no
4 longer required to make estimated CCFT payments to the state one year in
5 advance. In fact, California tax law now requires corporations to compute an
6 estimated tax “upon the basis of the net income for that taxable year.”²⁶ As such,
7 DRA recommends using the current year’s CCFT as a deduction in the current
8 year’s calculation of federal income taxes. Differing from D.89-11-058 yet more
9 representative of current California tax practice, DRA’s methodology provides a
10 more accurate estimate of a utility’s assumed tax consequences and revenue
11 requirements. More importantly, consistent with long-standing regulatory
12 tradition and Generally Accepted Accounting Procedures (GAAP), the DRA
13 methodology more closely adheres to the fundamental “matching principle,”
14 where costs incurred in a given period should be matched against the revenue or
15 benefits received in the same period.

16 (b) California Corporate Franchise Tax Total Percentage

17 Referencing D.84-05-036 yet failing to cite the specific ordering paragraph,
18 section, or discussion, CWS added six-basis points to the CCFT percentage used to
19 estimate state taxes for test year and escalation years. Through data requests,
20 review of Commission decisions, and personal interviews, DRA attempted to find
21 some justification for CWS’ inclusion of an additional 0.06% in state tax
22 estimates. Unable to substantiate the validity of this addition, DRA removed the
23 percentage, which reduced CCFT estimates by 0.06%.

²⁶ Ibid

1 (c) Calculation of the Interest Expense Deduction

2 A formula error in CWS' workpapers for calculating the Interest Expense
3 Deduction resulted in Working Cash being subtracted from Rate Base. DRA has
4 corrected this error in the calculation of the deduction for Marysville. The
5 recommended Interest Expense Deduction now equals Rate Base (including
6 working cash) multiplied by the current CWS weighted-average-cost-of-debt
7 (3.16%).²⁷

8 **2) GENERAL INCOME TAX CALCULATIONS**

9 In calculating income taxes, both DRA and CWS subtract common expenses
10 from estimated revenue. For the calculation of state taxes, CWS has calculated tax
11 depreciation amounts to reflect the required flow-through of deferred tax benefits,
12 while federal tax depreciation amounts reflect the requirements of normalization.
13 This methodology is consistent with the requirements of the Economic Recovery
14 Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982, and the Tax
15 Reform Act of 1986.

16 **D. CONCLUSION**

17 DRA recommends Commission adoption of DRA's estimates of Income Taxes
18 that have been calculated and presented in Tables 6-1 and 6-2.

²⁷ D.09-05-019: Base Year 2009 Cost of Capital for the three large multi-district Class A Water Utilities

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	2,273.2	2,295.6	22.4	1.0%
Deductions:				
O & M expenses	818.1	940.4	122.3	14.9%
A & G expenses	462.3	521.1	58.8	12.7%
G. O. Prorated expenses	421.3	567.8	146.5	34.8%
Exclude GO Book Depreciation	(56.2)	(65.3)	(9.1)	16.2%
Taxes not on Income	77.6	110.9	33.3	42.9%
Transportation Deprec Adj	(10.0)	(12.4)	(2.4)	24.0%
Interest	121.8	244.9	123.2	101.2%
Income before taxes	438.3	(11.8)	(450.2)	-102.7%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(395.5)	(643.7)	-248.2	62.8%
Taxable income for CCFT	42.9	(655.8)	(698.7)	-1629.8%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.4)	(0.4)	0.0%
CCFT	3.8	(58.3)	(62.1)	-1637.7%
<u>Federal Income Tax</u>				
Tax Depreciation	269.3	438.4	169.1	62.8%
State Corp Franch Tax	3.8	(29.3)	(33.1)	-873.2%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	165.2	(420.9)	(586.1)	-354.8%
Domestic Prod. Activities Ded.	(14.9)	37.9	52.8	-354.9%
Adjusted Taxable Income	150.3	(383.0)	(533.4)	-354.8%
FIT Rate	35.00%	35.00%		
FIT	52.6	(134.1)	(186.7)	-354.8%
Investment Tax Credit	1.1	1.1	0.0	0.0%
Total FIT	51.5	(135.2)	(186.7)	-362.3%
Total FIT & CCFT	55.3	(193.3)	(248.6)	-449.5%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	2,767.4	3,371.3	603.9	21.8%
Deductions:				
O & M expenses	819.9	944.4	124.5	15.2%
A & G expenses	462.3	521.1	58.8	12.7%
G. O. Prorated expenses	421.3	567.8	146.5	34.8%
Exclude GO Book Depreciation	(56.2)	(65.3)	(9.1)	16.2%
Taxes not on Income	77.6	110.9	33.3	42.9%
Transportation Deprec Adj	(10.0)	(12.4)	(2.4)	24.0%
Interest	121.8	244.9	123.2	101.2%
Income before taxes	930.7	1,059.9	129.2	13.9%
<u>Calif Corp Franchise Tax</u>				
State Tax Deductions	(395.5)	(643.7)	-248.2	62.8%
Taxable income for CCFT	535.2	416.2	(119.1)	-22.2%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.4)	(0.4)	0.0%
CCFT	47.3	36.4	(10.9)	-23.1%
<u>Federal Income Tax</u>				
Tax Depreciation	269.3	438.4	169.1	62.8%
State Corp Franch Tax	47.3	37.8	-9.5	-20.1%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	614.0	583.7	(30.4)	-4.9%
Domestic Prod. Activities Ded.	(55.3)	(52.5)	2.8	-5.0%
Adjusted Taxable Income	558.8	531.2	-27.6	-4.9%
FIT Rate	35.00%	35.00%		
FIT	195.6	185.9	(9.7)	-4.9%
Investment Tax Credit	1.1	0.0	(1.1)	-100.0%
Total FIT	194.5	185.9	(8.6)	-4.4%
Total FIT & CCFT	241.8	222.3	(19.5)	-8.1%

CHAPTER 7: UTILITY PLANT IN SERVICE

A. INTRODUCTION

DRA's and CWS' estimates for the Marysville District Plant in Service for the Test Year 2011 and Escalation Year 2012 are shown in Tables 7-1 and 7-2 at the end of this chapter.

DRA reviewed and analyzed CWS' testimony, application, Minimum Data Requirements, workpapers, capital project details, estimating methods, and responses to various DRA data requests. DRA also conducted a field investigation of most of the proposed specific plant additions before making its own independent estimates including adjustments where appropriate. Important and significant differences between DRA's and CWS' estimates of specific plant additions are attributed to the items as listed in Table 7-B.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that 1) plant additions for five specific projects in 2009 be disallowed, adjusted, or approved for Advice Letter treatment; 2) plant additions for five specific projects in 2010 be disallowed, adjusted, or approved for Advice Letter treatment; 3) plant additions for six specific projects in 2011 be disallowed, adjusted, or approved for Advice Letter treatment; 4) plant additions for eight specific projects in 2012 be disallowed, adjusted, or approved for Advice Letter treatment; 5) plant additions for carryover projects be adjusted to reflect DRA's estimates; and 6) plant additions for non-specifics in 2009 through 2012 be adjusted to reflect DRA's escalation factors. Based on these recommendations, DRA's estimates for the 2009, 2010, 2011, and 2012 plant additions are \$394,400, \$228,000, \$157,900, and \$204,000, respectively versus CWS' proposed amounts of \$1,643,000, \$2,195,000, \$1,831,600, and \$4,395,100, respectively for the same years.

**Table 7-A. Marysville District
Company funded Plant Additions,
Including Carryovers and Non-Specifics
(Thousands of Dollars)**

	2009	2010	2011	2012	AVG
DRA	\$394.4	\$228.0	\$157.9	\$204.0	\$246.1
CWS	\$1,643.0	\$2,195.0	\$1,831.6	\$4,395.1	\$2,516.2

Table 7-B. Specific Projects Differences Comparison

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2011	13318	Storage	650K Gal. Tank	\$1,442,800	\$0
2012	13318	Pumps	Electrical - 650K Gal. Tank	\$388,300	\$0
2012	13318	Structures	Pumphouse & Site Improvements - 650K Gal. Tank	\$598,600	\$0
2012	13318	Pumps	Pumping Equipment - 650K Gal. Tank	\$318,000	\$0
2009-2010	18844	Structures	New Customer Center - 2nd & D Streets - Phase 2	\$454,900	\$0
2012	17434	Mains	Upgrade Distribution System - Sta. 15	\$408,500	\$0
2010	17721	Hydrants	Relocate Hydrants - 7th & E.; 3rd & E.; 1700 Ellis Lake Dr.; & Ellis Lake Ct.	\$35,300	\$21,600
2009	17727	Equipment	0.75 Ton Pickup w/ Accessories	\$32,900	\$0
2009	17778	Equipment	Bobcat Forklift / Loader / Backhoe	\$37,800	\$0
2011	17863	Mains	D Street - 9th & 14th Street	\$362,200	\$0
2011	19649	Wells	Drill & Develop New Well	\$798,300	MTBE Proceeds
2012	19649	Pumps	Electrical - New Well	\$311,000	MTBE Proceeds
2012	19649	Structures	Pumphouse & Site Improvements - New Well	\$370,800	MTBE Proceeds
2012	19649	Pumps	Pumping Equipment - New Well	\$122,000	MTBE Proceeds
2009	19654	Pumps	Flow Meter - Sta. 10	\$18,400	\$10,800
2010	19656	Land	New Well Site	\$297,000	MTBE Proceeds
2010	20715	Pumps	Replace Pump and Add Energy Efficient Monitoring - Sta. 13-01	\$79,400	\$0
2011	20726	Pumps	Replace Pump & Add Energy Efficient Monitoring - Sta. 12-01	\$89,600	\$0

2009	17196	Meters	Conversion of Flat Rate Services to Metered Services	\$406,315	Advice Letter
2010	25969	Meters	Conversion of Flat Rate Services to Metered Services	\$239,650	Advice Letter
2011	26208	Meters	Conversion of Flat Rate Services to Metered Services	\$239,650	Advice Letter
2012	26209	Meters	Conversion of Flat Rate Services to Metered Services	\$239,650	Advice Letter
2009		Meters	Small Meter Replacements	\$16,100	\$8,680
2010		Meters	Small Meter Replacements	\$16,700	\$8,680
2011		Meters	Small Meter Replacements	\$17,400	\$8,680
2012		Meters	Small Meter Replacements	\$18,100	\$8,680

1

2 C. DISCUSSION

3 The Marysville District has recorded \$808,300 in average gross plant
4 additions during the past five years (2004-2008).²⁸ The district's average gross
5 plant addition request for the period of 2009-2012 is \$2,549,400 which represents
6 an unprecedented 215% increase over historical recorded plant additions. It
7 should be emphasized that the recorded plant additions themselves have exceeded
8 the Commission authorized gross plant addition budgets during 2004-2007 by
9 \$2,194,200 which represents an 82% budgetary overrun of authorized additions
10 for that period.²⁹ In the years since the last GRC (2006-2007 data), CWS has
11 recorded \$2,112,700 more gross additions than authorized, not including 2008
12 which is difficult to quantify due to interim rates. Because these additions have
13 not been authorized (they are only mentioned once in a misleading sentence next
14 to an unexplained table comparing authorized to recorded capital additions in

²⁸ Gross plant additions include company funded plant additions as well as contributions and advance deposits for specific plant.

²⁹ CWS Response to MD7-001. The authorized gross plant additions for this period averaged \$301,100.

Chapter 8 of the RO report) they escape reasonableness review while significantly increasing rates.

DRA issued multiple data requests investigating the significant mismatch between authorized and recorded capital additions for the last five years.³⁰ In its responses, CWS did not offer any meaningful explanation of the differences other than the fact that contributions and advances are estimated in the authorized additions column, while they derive from actual figures in recorded additions. DRA considers this level of recorded plant additions excessive, not compliant with previous Commission orders, and therefore recommends a systematic audit of actual capital additions and authorized budgets in the subsequent GRC, as was ordered in D.03-09-021 for all future CWS general rate cases.³¹ On page 54 of that Decision, it states:

“We will, therefore, require that Cal Water submit a report in each of its future district general rate case filings showing budgeted capital projects and actual expenditures. We expect these reports to compare the budgeted capital projects to actual expenditures, and to explain each deviation and deferral, with revised in-service dates for the deferrals. We will use this historic analysis to guide our evaluation of any proposed capital projects.”

Since the excessive capital additions have not been justified or explained in any shape or form by CWS in this GRC, DRA recommends removing the

³⁰ DRA data requests MD7-001 and NKS-007.

³¹ According to CWS Response to DRA data request NKS-007, CWS does not believe it needs to comply with Order 3 of D.03-09-021 which states, “In all future general rate case applications, Cal Water shall present an initial showing with the major changes that led to the requested change identified and quantified. Each issue should include detailed explanations and justifications for the requested change, with cross-references to evidentiary support. All tables of data should be explained and analyzed. All necessary evidence should be included in the record.”

1 \$2,112,700 in known excess plant additions from the 2009 beginning of year
2 balance until CWS can provide reasonable justifications for the unprecedented
3 level of budget overruns. On a going-forward basis, DRA's recommendation of
4 \$279,300 in average gross plant additions during 2009-2012 is 7% less than
5 historically authorized levels.

6 **1) Carryover Projects**

7 CWS identifies \$572,220 in 2009, \$972,700 in 2010, and \$248,400 in 2011
8 carryover projects, respectively, in its ratebase workpapers (totaling \$1,793,320).
9 In the Results of Operation report for the Marysville District, CWS identifies
10 \$1,491,000 in carryover projects. DRA was not able to reconcile the two
11 estimates, even after a clarifying data request was sent.

12 Based upon the CWS response to the data request MD7-008 on all
13 carryover projects, DRA calculated its carryover estimate by subtracting advice
14 letter projects from the carryover totals, since advice letter projects have uncertain
15 costs and completion dates, and may not occur at all.³² Based upon its analysis,
16 DRA recommends no budget for carryover projects in the Marysville District.

17 CWS lists carryover project 17755 for granular activated carbon (GAC)
18 treatment at Station 14, at a total cost of \$972,000 in 2010. This project was not
19 discussed in the last GRC DRA Report, nor was it mentioned in the last Decision
20 or Settlement. From information obtained during the site visit and through data
21 requests, this project will treat iron bacteria contaminating the well at Station 14
22 which was constructed in 1979. Although DRA generally supports cost-effective
23 treatment of contaminated wells, DRA remains unconvinced that there is sufficient
24 demand to necessitate adding the well back into service at this time. As will be
25 discussed in later sections, CWS currently meets all CDPH standards for peak

³² Advice letter projects are handled separately though a rate base offset.

1 hour demand (PHD) conditions, as well as CPUC requirements for average day
2 demand (ADD) plus fire flow. Given the strong effect of the economic recession
3 over the next few years as well as increased conservation efforts, DRA projects
4 that demand will not increase, but will actually decrease over the rate case cycle.
5 Therefore, DRA recommends deferring this project to the next GRC, when
6 demand and supply can be reevaluated to determine if adding new water supply is
7 necessary to meet future demand.

8 CWS lists carryover project 17829 to construct the new customer service
9 center with a budget of \$248,400, which was not given advice letter treatment.
10 CWS lists project 13316 to purchase land for a new customer service and
11 operations center (\$243,000 cap), project 13318 for a new 650,000 gallon storage
12 tank (\$1,294,000 cap), and project 13327 for a new well (\$1,080,000 cap) which
13 were approved in the last GRC with advice letter treatment and specific caps.
14 CWS seeks to move carryover project 13318 for the new tank construction into
15 rates in this GRC without following the advice letter process and with a budget
16 that more than doubles the original costs.³³ DRA will address this proposal in a
17 separate section below.

18 In terms of the new customer service center, CWS purchased a lot at 2nd
19 and D Streets for \$291,000 in 2008, \$48,000 over the advice letter cap. DRA
20 requested information on the customer service center that was mentioned in the
21 project justification but was missing from the attachments. CWS was unable to
22 provide the attachments which included “a detailed room by room analysis of the
23 new building and a comparison of the space currently utilized in Marysville’s
24 existing Customer/Operation center.” CWS stated that this information was

³³ CWS now budgets \$2,747,700 for project 13318.

1 provided in the 2005 GRC, but that it was no longer readily available.³⁴ If CWS
2 cannot keep and track important files for its proposed capital improvement
3 projects that are still in progress, DRA cannot evaluate their reasonableness.

4 In the last GRC, DRA and CWS agreed that in connection with the advice
5 letter project for the land purchase, CWS would, “prepare a detailed justification
6 for the new operation center in its next GRC filing to address DRA’s concerns that
7 are expressed in its report.” Those concerns included the 357 sq.ft. per employee
8 that CWS was planning for the new customer service center, and the existing
9 building’s 200 sq. ft. per employee, which both exceed the 100 sq. ft. per
10 employee industry standard cited by CWS. DRA also mentioned that CWS should
11 present a formal cost-benefit analysis since CWS was paying a very low rent for
12 its existing customer service center (about \$1,000 per month). None of these
13 items were addressed in the project justification submitted by CWS. Therefore,
14 DRA recommends disallowing all projects (17829, 13316, and 18844) related to a
15 new customer service center, including the advice letter carryover, due to
16 insufficient need, lack of justification, and failure to comply with Commission
17 requirements.

18 CWS stated in its workpapers that project 13327 for a new well has been
19 cancelled and replaced by project 19649 which has a total cost of \$1.9 million.
20 CWS and DRA both agree that project 19649 should be funded by the proceeds
21 from the MTBE litigation proceeds.³⁵ Therefore, DRA has removed this project
22 from the rate case cost estimates.³⁶ DRA has removed \$2,100,000 in
23 contributions in aid of construction listed by CWS from the MTBE settlement
24 proceeds in its ratebase workpapers. Instead, DRA recommends that MTBE

³⁴ CWS response to DRA data request MD7-013, Question 6.

³⁵ CWS response to DRA data request SWO-002.

1 contributions should be placed in a memorandum account with ratemaking
2 treatment as modified by Phase I of A.09-07-011.

3 The advice letter deadline for carryover projects is the effective date for
4 new rates in the current GRC, which is January 1, 2011.³⁷ DRA recommends that
5 any advice letter projects it has not recommended disallowing should keep their
6 existing deadlines and caps.

7 **2) Main Replacement Program**

8 CWS proposes a specific main replacement budget of \$133,900 in 2009, no
9 specific budget in 2010, \$362,200 in 2011 and \$408,500 in 2012 plant additions
10 for a total of \$904,600. CWS' proposed average main replacement budget is
11 \$226,200 per year, which is a 366% increase over the five year average internal
12 CWS budget of \$48,500.³⁸ It should be noted that although the historical CWS
13 budgets are much lower than CWS' proposal in this GRC, the historical budgets
14 do not correspond to any Commission authorized level of main replacement.³⁹ As
15 well, the historical CWS' budgets do not necessarily relate to actual main
16 replacement costs during that time period. CWS declined to provide historical
17 costs for mains, services, hydrants and meters to DRA, despite multiple data
18 requests.⁴⁰ In the absence of actual main replacement cost data, DRA
19 recommends an average main replacement budget of \$48,500 per year, for a total

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³⁶ CWS response to DRA data request MD7-003, Question 5.

³⁷ D.06-08-011. OP 7, p.68.

³⁸ CWS General Report on the Results of Operation and Prepared Testimony, July 1, 2009, Appendix 7.

³⁹ Email communication with Tess Cayas of CWS, on January 5 2010.

⁴⁰ See non-responsive CWS answers to DRA data requests MD7-016, MD7-017 and NKS-005. CWS states in the responses that, "This level of detail is not readily available as Cal Water District does not track its annual cost of facilities in this manner."

1 specific main budget of \$194,000, not including \$88,800 in non-specific main,
2 service and hydrant replacement during 2009-2012.

3 **Table 7-C. CWS Historical Main Replacement Budget and**
4 **Weighted Average Unit Costs**

Marysville	CWS Mains Budget (\$)	Mains Length (ft)	Cost/Foot
2004	\$0	0	0
2005	\$91,400	1,102	\$83
2006	\$86,400	800	\$108
2007	\$64,800	600	\$108
2008	\$0	0	\$0
AVG	\$48,500	500	\$97

5 CWS' claimed justification for these projects usually asserts either numerous leaks
6 or fireflow improvements as a justification for replacement of these mains,
7 services and hydrants.

1 (a) **Fireflow:** In terms of fire flow, according to GO 103-A, “The
2 utility shall not be responsible for modifying or replacing at its expense any
3 existing facilities, which are otherwise adequate, in order to provide increased fire
4 flow or duration due to changes in the standards after the initial construction.”⁴¹
5 CWS’ replacement of pipe merely to improve fireflow cannot therefore be
6 justified.

7 (b) **Leaks/100 miles of main:** Further, CWS provided the following
8 response to ALJ O’Donnell’s request for an exhibit showing CWS’ methodology
9 for mains replacement, “CWS annually determines the number of leak for each
10 district on the basis of leaks per one hundred miles of main. This information
11 along with the actual length of targeted mains in a district is used to set the annual
12 target main replacement length.” However, when DRA asked for the leaks per
13 one hundred miles of main for projects in this GRC, CWS was unable to provide
14 such information.⁴²

15 (c) **Repair vs replacement:** When DRA asked CWS how it
16 concluded a particular targeted main was beyond its “useful life”, CWS
17 responded: “In reality, one can extend the “useful life” of many facilities, but the
18 cost to do so may outweigh the cost to replace.”⁴³ However when DRA asked
19 CWS if it did any analysis to show that the cost to repair was higher than the cost
20 to replace for the targeted mains in this general rate case, CWS said it had not
21 done such an analysis.⁴⁴

⁴¹ GO 103-A, VI. Fire Protection Standards, 3.Replacement of Mains A.Changes to Fire Code, p.25.

⁴² CWS’ response to DRA data request NKS-006, question 7, attached in Appendix B to the Chico District Report.

⁴³ CWS’ response to DRA data request NKS-002, question 11, attached in Appendix B to the Chico District Report.

⁴⁴ CWS’ response to DRA data request NKS-002, question 8, attached in Appendix B to the
(continued on next page)

1 DRA therefore concludes that CWS' is not able to effectively
2 prioritize its specific hydrant, main and service replacement projects based on
3 actual conditions of the pipe and using tools such as AWWA's "Decision Support
4 System for Distribution System Piping Renewal", which have been available since
5 2002.⁴⁵ DRA notes that other utilities, such as California American Water
6 Company, routinely prepare a "Condition Based Assessment" document prepared
7 by a licensed professional engineer to assess the condition of their transmission
8 and distribution systems, in each district to identify and prioritize investment in
9 transmission and distribution infrastructure.⁴⁶ CWS was unable to produce any
10 leak history record documentation for its main replacement projects, even though
11 it claimed that the sections of main had a history of leaks.

12 Main replacement project 17434 to replace an existing 8" asbestos concrete
13 main with a 12" ductile iron main cites hydraulic limitations on the main leading
14 away from Station 15 as described in the Water Supply and Facilities Master Plan
15 (WS&FMP). The WS&FMP performed a hydraulic analysis on the Marysville
16 water distribution system, based upon a criterion of meeting MDD while
17 maintaining 20 psi at all service connections to determine fire flows. This is a
18 flawed assumption, as there is no requirement to meet MDD plus fire flow for an
19 existing water system. Only new portions of a system are required to meet this
20 standard.⁴⁷ Therefore any fire flow deficiencies alleged as a result of this analysis

(continued from previous page)
Chico District Report.

⁴⁵ In its response to DRA data request NKS-002, question 12, CWS replied it had not used this or a similar tool to evaluate its mains targeted for replacement in this general rate case. The response is attached in Appendix B.

⁴⁶ For example, in A.08-01-027, Cal Am conducted a condition-based assessment of its infrastructure for its Monterey district, and prioritized its proposals in that rate case based on the condition of the infrastructure.

⁴⁷ GO 103-A. II. Standards of Service. B. Quantity of Water. 3b) Potable Water System Capacity, p.11.

1 should be discounted. The correct analysis would simulate average day demand
2 conditions with fire flow standards for the existing system. As well, the
3 WS&FMP only recommends the main upsizing assuming increased demand at
4 build-out conditions; based upon an analysis of existing conditions as of June
5 2009, it does not recommend the upsizing. Therefore, DRA recommends that this
6 main replacement project be disallowed as it relies on a faulty fire flow analysis
7 and is premature.

8 **3) Project 17721 - Hydrant Relocation**

9 CWS proposes relocating four hydrants at a total cost of \$35,300 in 2010
10 capital additions. CWS states that these hydrants have been hit by automobiles
11 multiple times in the last 20 years, causing expensive repairs and limiting fire
12 fighting capacity during those times. CWS did not provide any documentation of
13 the actual number of times automobiles crashed into fire hydrants nor the time
14 hydrants were out of service during those periods. Neither did CWS produce a
15 letter from the local fire department supporting fire hydrant projects for the
16 Marysville District. CWS estimates a cost of \$8,825 per fire hydrant which is
17 higher than hydrant budgets in other districts. Based upon hydrant costs in the
18 Mid-Peninsula district of \$5,400 or less, DRA recommends adjusting the cost of
19 this project to \$21,600. DRA also recommends that this budget be used to
20 upgrade deficient fire hydrants or install new hydrants, instead of relocation. Until
21 CWS can substantiate the frequency of disruption to fire flow or demonstrate
22 support from the local fire authority, existing hydrants should not be removed.

23 **4) Projects 13318 – 650,000 Gallon Reservoir**

24 CWS budgets \$1,442,800 in 2011 and \$1,304,900 in 2012 capital additions
25 for a new 0.65 MG storage tank (total cost of \$2.7 million). CWS proposes this
26 project in order to meet an alleged 0.5 MG storage deficit based upon the
27 WS&FMP (Water Supply & Facilities Master Plan) analysis. DRA strongly

1 disagrees with this assessment. The WS&FMP performed a faulty and
2 unsubstantiated analysis of the storage and pumping needs of the district. The
3 WS&FMP lists three components of storage requirements as criteria for meeting
4 storage standards. These components are operational (or equalization) storage
5 which is assumed to be 25% of Maximum Day Demand (MDD) in the absence of
6 a diurnal demand curve, fire reserve storage which is assumed to be the highest
7 fire flow for the land use in the Marysville District,⁴⁸ and finally emergency
8 storage which is assumed to be 50% of MDD (or one average day demand).

9 DRA investigated all components of storage requirements claimed by the
10 WS&FMP, and found that there is no governing standard for emergency storage in
11 the state of California.⁴⁹ CWS claims in its WS&FMP that CDPH recommends
12 an emergency storage component of at least 25% of the MDD and up to a
13 maximum of one average day demand (ADD). When DRA asked CWS to provide
14 the exact citation and quote from the Drinking Water Regulations in Title 22,
15 Chapter 16 where CDPH calls for a minimum emergency supply in each pressure
16 zone equivalent to the average day demand, CWS was unable to do so.⁵⁰

17 Instead, DRA discovered that CDPH recommends that public water
18 systems should be able to meet 4 hours of Peak Hour Demand (PHD)⁵¹ with

⁴⁸ The WS&FMP calculates the fire reserve to be 0.96 MG based on a fire flow of 4,000 gpm for 4 hours.

⁴⁹ CWS admits that the AWWA has no standard for emergency storage in response to DRA data request MD7-007, Question 5, and MD7-012, Question 2. Similar statements are made in many of the WS&FMP documents as well.

⁵⁰ DRA issued data request MD7-013 on November 25, 2009 and received a response on January 27, 2010. CWS stated that the consultant who prepared the WS&FMP had used an out-dated reference that incorrectly cited pre-1994 CDPH drinking water standards.

⁵¹ PHD is typically calculated by multiplying the MDD by a peaking factor of 1.5 according to CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 2, §64554. New and Existing Source Capacity (b)(1).

1 storage, source capacity and/or emergency connections in each pressure zone.⁵²
2 In Marysville, the PHD is equivalent to 1.27 MG over a four hour period.⁵³
3 Marysville has active wells with a total capacity of 1.1 MG over a 4 hour period
4 along with 0.85 MG of storage for a total of 1.95 MG, leaving a surplus of 0.68
5 MG. At build out, the four hour PHD requirement increases to 1.3 MG, which is
6 still easily met by the available 1.95 MG.

7 The CDPH standard is similar to what the WS&FMP refers to as the
8 operational storage requirement, but the CDPH requirement allows source
9 capacity⁵⁴ and emergency connections to count on an equal basis with storage
10 volumes in meeting the PHD standard. The WS&FMP creates an entirely separate
11 category of emergency storage which has no precedent, above and beyond
12 operational and fire reserve storage.⁵⁵

13 Historically, GO 103 required a water system to meet average day demand
14 and two hours of fire flow. Currently, the average day demand in the Marysville
15 District is 2.8 MGD. In order to meet the current maximum fire flow plus average
16 day demand, a total volume of 0.71 MG over 2 hours is necessary.⁵⁶ At build-out
17 the ADD actually decreases according to the WS&FMP, so only the existing
18 conditions need to be evaluated. The total source capacity currently available in

⁵² CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 2, §64554. New and Existing Source Capacity (a)(1) for systems with more than 1,000 service connections.

⁵³ Based upon a PHD of 7.6 MGD for existing conditions.

⁵⁴ “Source capacity” means the total amount of water supply available, expressed as a flow, from all active sources permitted for use by the water system, including approved surface water, groundwater, and purchased water. CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 1, Definitions §64551.40.

⁵⁵ Fire reserve storage serves as an emergency storage in most situations.

⁵⁶ $4000 \text{ gpm} \times 60 \text{ minutes} \times 2 \text{ hours} \div 12 \text{ hours} = 0.71 \text{ MG}$.

1 Marysville to meet this condition is 6.6 MGD divided by 12 hours, or 1.1 MG
2 which is more than sufficient for both existing and build-out scenarios.

3 In the event of an electrical power outage or other emergency, CWS has
4 back-up power generators or diesel engines at wells 7, 9, 12, 13, and 15, for a total
5 emergency capacity of 4.0 MGD. As well, CWS has a proposal (project 17365) in
6 this GRC for a portable generator that will be able to power any well in the
7 district. DRA supports this project. Adding one more well with back up power
8 brings the total emergency capacity to 5.4 MGD, which is more than the District's
9 MDD of 5.1 MGD.

10 Therefore, the WS&FMP incorrectly states that there is currently a storage
11 capacity deficit in the Marysville district. In actuality, the Marysville District has
12 more than sufficient storage, source capacity and emergency power at well stations
13 to meet both existing and build-out operational and fire reserve storage
14 requirements. DRA has removed the capital costs associated with project 13318
15 from capital additions.

16 **5) Projects 20715, 20726, 19654, 19657, 19658, and 19663**
17 **– Pump Replacement & Energy Monitoring Program**

18 CWS budgets \$108,000 in 2010, 2011, and 2012 capital additions (projects
19 19657, 19658, and 19663) for power meters, flow meters and pressure recording
20 transducers to more accurately measure the real-time energy consumption at its
21 well and booster stations in the Marysville District. DRA supports a pilot study of
22 the energy monitoring program to properly identify the costs and operational
23 benefits to having highly accurate and fine-scaled information on the unit costs (in
24 both dollars and kWh) of water supply. DRA believes that a pilot program in the
25 Marysville District is appropriate after CWS informed DRA that most of the
26 capital infrastructure was already in place in this district, thus requiring little to no
27 capital additions. Since the operational efficiency benefits are highly uncertain, a

1 pilot program would allow quantification before a company-wide program is
2 launched.⁵⁷ DRA recommends approving the \$108,000 for these projects.

3 CWS requests \$169,000 for projects 20715 and 20726 to replace pumps
4 and add energy monitoring devices. DRA examined recent pump test data for
5 these pumps and found that in October 2008, the pumps had registered an
6 operational plant efficiency of 63% and 67%, respectively. Thus, these pumps
7 should not be replaced. CWS did not provide DRA with an estimate for the cost
8 of the energy monitoring equipment, but DRA believes CWS can use its non-
9 specific pump budget for these devices. DRA also recommends adjusting the cost
10 of project 19654, for a flow meter at station 10, budgeted by CWS at \$18,400.
11 Based upon project 19663 to install four flow meters at a cost of \$10,800 each,
12 DRA recommends that project 19654 should be approved at a revised cost of
13 \$10,800.

14 **6) Projects 17727, 17728 & 17778 - Vehicle Replacement**

15 CWS proposes project 17727 to replace a Ford F-250 and project 17728 to
16 replace a two wheel drive SUV each at a cost of \$32,900 in 2009 and project
17 17778 to replace a forklift/loader at a budgeted cost of \$37,800 in 2009. CWS
18 provided mileage information on its vehicle replacement and stated that the
19 forklift replacement was due to changing air quality regulations being enforced by
20 California Air Regulatory Board (CARB) that could not be met by retrofitting.
21 DRA examined the vehicle replacement projects and determined that only project
22 17728 conform to the current DGS replacement criteria at 120,000 miles for cars
23 and light trucks. The Ford F-250 currently has less than 65,000 miles and DRA
24 predicts it will not exceed 120,000 miles until 2017.

⁵⁷ In this GRC, CWS budgeted \$3.7 million for the energy monitoring program on a company-wide basis.

1 DRA also investigated recent CARB regulations that would compel CWS
2 to replace its forklift, and found only the Diesel Retrofit program for heavy duty
3 on-road trucks and buses which became effective in 2010.⁵⁸ Since CWS states
4 that the forklift is gasoline powered, it remains unclear what new regulation would
5 force CWS to replace the vehicle. DRA recommends that this project be
6 disallowed.

7 DRA notes that the Commission has previously ruled that the most recent
8 DGS criteria were the appropriate standards for replacement in rate cases
9 involving both CWS and Southern California Water Company.⁵⁹ DRA discovered
10 that DGS no longer uses an age based criteria (formerly 8 years) and now relies
11 upon mileage as the sole metric to determine replacement.⁶⁰ DGS states that,
12 “The decision whether to retain, reutilize, or dispose of any vehicle not meeting
13 the minimum replacement criteria shall be based on an inspection taking into
14 account the following factors:

- 15 • Current mechanical condition.
- 16 • Previous maintenance and repair record.
- 17 • Extent of needed repairs and availability of parts and life
- 18 expectancy of vehicle after repair.
- 19 • Current sale value.
- 20 • Cost and availability of replacement unit and accessories.
- 21 • Owning agency’s ability to replace unit.

⁵⁸ <http://www.arb.ca.gov/msprog/onrdiesel/documents/tboverviewfs.pdf>

⁵⁹ D.06-01-025 for Southern California Water Company, and D.07-12-055 for CWS.

⁶⁰ DGS Fleet Handbook, April 22, 2008. <http://www.documents.dgs.ca.gov/ofa/handbook.pdf>.

1 Since CWS did not submit a report to describe why an exception to the
2 DGS criteria should be made to any of its vehicle replacements in Marysville,
3 DRA recommends approving one vehicle projects (17728) at an estimated cost of
4 \$32,900, in 2009 capital additions.

5 **7) Small Meter Replacement, 2009 to 2012**

6 CWS budgets \$68,300 in capital additions during 2009-2012 to replace 56
7 small customer meters per year. CWS did not provide any data on how it
8 determined the annual number of customer meters to replace or how it arrived at
9 its unit cost estimate of \$305 per meter. DRA assumes that the number of meters
10 to be replaced is determined by GO 103-A requirements for meter lifespan before
11 retesting or replacement.⁶¹ However, DRA does not agree with the unit costs for
12 the meters. Based upon other districts such as Mid-Peninsula in this rate case,
13 DRA believes a unit cost of \$155 per meter is more appropriate and in line with
14 industry standard costs. Therefore, DRA recommends that the budget for small
15 meter replacement be adjusted to \$8,680 per year, for a total budget of \$34,700.

16 **8) Projects 17196, 25969, 26208, & 26209 - Flat to Meter Conversion**

17 CWS budgets \$406,300 in 2009, and \$239,700 each in 2010, 2011 and
18 2012 capital additions to convert 261 flat rate service customers per year to
19 metered service. DRA agrees with the need to convert flat rate customers to
20 metered connections to encourage conservation and comply with state law by
21 2025. Based upon cost data that CWS provided to DRA regarding actual costs
22 incurred to date, DRA believes these projects should be handled through the
23 advice letter process. According to data request responses, in Marysville, average
24 meter conversion costs have been \$484 per connection (including new service
25 lines) during 2008-2009 which is \$126,300 for every 261 conversions. Therefore,

⁶¹ 20 years for meters smaller than 1", 15 years for 1" meters, and 10 years for meters larger than
(continued on next page)

1 DRA recommends an advice letter with a cap of \$150,000 be filed by CWS each
2 year to meet its flat to meter conversion goals.

3 **9) Non-specific Capital Budgets, 2009 to 2012**

4 CWS proposed \$106,900, \$109,100, \$111,600, and \$114,100, respectively
5 in plant additions for non-specifics in the four years from 2009 to 2012. CWS non-
6 specific estimates are based on a 10-year average with a 2% yearly escalation
7 factor. DRA agrees with using the 10-year average, but has used escalation
8 factors for 2009 through 2012 from the May 2009 Energy Cost of Service Branch
9 escalation factors memo. These factors are: 2009 = (5.5)%; 2010 = (0.1)%; 2011

(continued from previous page)
1”.

1 = 2.0%; 2012 = 2.7%. Using these escalation factors the non-specific estimates
2 are \$99,100, \$99,100, \$100,700, and \$103,600 for 2009, 2010, 2011, and 2012
3 respectively.

4 **D. CONCLUSION**

5 DRA's recommendations have been incorporated in the calculations for
6 DRA's recommended Plant in Service as shown in Table 7-1 and Table 7-2.

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

PLANT IN SERVICE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Plant in Service - BOY	9,276.4	14,680.0	5,403.6	58.3%
Additions				
Gross Additions	191.2	1,864.8	1,673.6	875.3%
Capitalized Interest	4.6	45.0	40.4	878.3%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>(31.9)</u>	<u>(31.9)</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	163.9	1,877.9	1,714.0	1045.8%
Adjustments				
Gen. Plant allocated to contracts	(3.9)	(5.9)	(2.0)	51.3%
Historic Capitalized Interest	(6.0)	(6.0)	0.0	0.0%
Plant in Service - EOY	9,440.3	16,557.9	7,117.6	75.4%
Weighting Factor	25.7%	25.7%		
Wtd. Avg. Plant in Service	9,308.7	15,151.2	5,842.6	62.8%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

PLANT IN SERVICE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	9,440.3	16,557.9	7,117.6	75.4%
Additions				
Gross Additions	237.3	4,428.3	4,191.0	1766.1%
Capitalized Interest	5.7	106.1	100.4	1761.4%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>(31.9)</u>	<u>(31.9)</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	211.1	4,502.5	4291.4	2032.9%
Adjustments				
Gen. Plant allocated to contractors	(3.9)	(5.4)	-1.5	38.5%
Historic Capitalized Interest	(5.4)	(7.0)	-1.6	29.6%
Plant in Service - EOY	9,651.4	21,060.4	11,409.0	118.2%
Weighting Factor	25.7%	25.7%		
Wtd. Avg. Plant in Service	9,485.3	17,703.9	8,218.6	86.6%

1 **CHAPTER 8: DEPRECIATION RESERVE AND**
2 **DEPRECIATION EXPENSE**

3 **A. INTRODUCTION**

4 This chapter presents DRA’s analyses and recommendation on
5 Depreciation for CWS’ Marysville District. Tables 8-1 and 8-2 show weighted
6 average accumulated depreciation and amortization for Test Year 2011 and
7 Escalation Year 2012.

8 **B. SUMMARY OF RECOMMENDATIONS**

9 Differences in DRA’s and CWS’ estimates are the result of different plant
10 additions for the test year and the escalation year. These differences are discussed
11 in Chapter 7, Utility Plant in Service.

12 **C. DISCUSSION**

13 CWS depreciation rates for components listed in the CPUC Uniform
14 System of Accounts for Water Utilities are based on a “Depreciation Study as of
15 December 31, 2006” prepared by AUS Consultants dated June 21, 2007. If the
16 depreciation rates proposed in the study are used, instead of the depreciation rates
17 adopted in D.06-08-011, the overall composite depreciation rate for the Marysville
18 District decreases by 1.18% (from 4.38% to 3.20%) and 1.06% (from 4.24% to
19 3.18%) in Test Year 2011 and Escalation Year 2012, respectively.

20 DRA accepts the depreciation rates for accounts as provided by CWS, but
21 recommends that DRA perform an audit of CWS’ submitted Depreciation Study in
22 the next General Rate Case. The Depreciation Study should use a 0% salvage
23 value for small mains (<6” in diameter). This recommendation is consistent with

1 the procedure that CWS uses to replace these small mains, abandoning the old
2 main in place, when it is replaced.⁶²

3 Based on the annual depreciation rates for accounts as provided in CWS’
4 Depreciation Study the CWS estimates of implicit composite depreciation rates are
5 3.20% for Test Year 2011 and 3.18% for Escalation Year 2012. The DRA
6 estimates of implicit composite depreciation rates are 3.12% for Test Year 2011
7 and 3.13% for Escalation Year 2012.⁶³ Differences between CWS and DRA
8 estimates for composite depreciation rate are due to differences in Plant-in-Service
9 estimates and subsequent differences in Beginning of Year Gross Depreciable
10 Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates
11 are discussed in Chapter 7.

12 **D. CONCLUSION**

13 DRA reviewed and accepts the methodologies outlined in CWS’
14 Depreciation Study. DRA recommends an audit of CWS’ Depreciation Study in
15 the next GRC.

16 DRA recommends that the Commission adopt DRA’s adjusted numbers for
17 depreciation.

⁶² For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4” main is \$0, this is also attached as Tab L in Appendix B to this report.

⁶³ Composite Depreciation Rates can be found in Workpaper 9-B2.

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	4,165.3	4,117.3	(48.0)	-1.2%
Accruals				
Transportation Equipment	7.4	9.5	2.1	28.4%
Contributed Plant	28.7	96.0	67.3	234.5%
Allocated non-reg contracts	0.2	0.3	0.1	50.0%
Other Plant in Service	304.0	328.8	24.8	8.2%
Total Accruals	340.3	434.5	94.2	27.7%
Retirements	(37.7)	(37.7)	0.0	0.0%
Depreciation Reserve - EOY	4,439.2	4,418.1	(21.1)	-0.5%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	4,302.3	4,267.7	(34.6)	-0.8%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	4,439.2	4,418.1	(21.1)	-0.5%
Accruals				
Transportation Equipment	7.5	9.5	2.0	26.7%
Contributed Plant	29.9	96.5	66.6	222.7%
Allocated non-reg contracts	0.2	0.3	0.1	50.0%
Other Plant in Service	309.0	383.6	74.6	24.1%
Total Accruals	346.6	489.9	143.3	41.3%
Retirements	(37.7)	(37.7)	0.0	0.0%
Depreciation Reserve - EOY	4,748.1	4,870.3	122.2	2.6%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	4,578.7	4,596.0	17.3	0.4%

CHAPTER 9: RATEBASE

A. INTRODUCTION

DRA and CWS' estimates for Rate Base for Test Year 2011 and Escalation Year 2012 are discussed in this Chapter.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends adoption of its estimates for: Plant in Service, Depreciation Reserve, and Rate Base.

C. DISCUSSION

Tables 9-1 & 9-2 show DRA's and CWS' estimates of Rate Base for Test Year 2011 and Escalation Year 2012. The significant differences between the Rate Base developed by DRA and CWS are due to the differences in the estimates for Weighted Average Plant in Service, Depreciation, Working Cash, and General Office Allocation.

D. NET-TO-GROSS MULTIPLIER

The net-to-gross multiplier represents the change in gross revenue required to produce a unit change in net revenue. Both DRA and CWS have calculated three multipliers which reflect: 1) the increase required under 100% equity-financing where State and Federal taxes are incurred; 2) the increase required under 100% debt financing where taxes are not incurred (identical to the increase necessary to offset expenses); and 3) the increase required for additions to ratebase, which incorporates the capital structure and financing costs of the utility.⁶⁴

⁶⁴ As adopted in Commission Decision 09-05-019

1 DRA and CWS use similar methodologies in calculating the net-to-gross
2 multipliers. Calculations are shown in Table 9-3 and results are presented below.
3 DRA's adjustment to the Domestic Production Activities Deduction (*see Chapter*
4 *5*) results in slightly higher numbers than those calculated by CWS.

5

6 **California Water Service Company**
7 **MARYSVILLE**
8 **Net to Gross Multiplier**
9

	CWS	DRA
100% Equity	1.60847	1.61568
100% Debt (expense)	1.00375	1.00375
Ratebase Additions	1.32655	1.33040

10

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Serv.	9,308.7	15,151.2	5,842.6	62.8%
Materials & Supplies	57.3	57.3	0.0	0.0%
Working Cash - Lead-Lag	51.8	72.2	20.4	39.3%
Amt withheld from Employees	(1.1)	(1.1)	0.0	0.0%
Wtd. Avg. Depr. Res.	(4,302.3)	(4,267.7)	34.6	-0.8%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	195.9	195.9	0.0	0.0%
Contributions	567.2	2,540.2	1,973.0	347.8%
Reserved Amort.Intangibles	59.7	71.0	11.3	18.9%
Deferred Taxes	707.7	707.7	0.0	0.0%
Unamortized ITC	17.4	17.4	0.0	0.0%
General Office Alloc	232.4	345.7	113.3	48.8%
Taxes on - Advances	16.0	16.0	0.0	0.0%
Taxes on - CIAC	38.3	38.3	0.0	0.0%
Average Rate Base	3,853.2	7,879.6	4,026.4	104.5%
Interest Calculation:				
Avg Rate Base	3,853.2	7,751.2	3,898.0	101.2%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	121.8	244.9	123.2	101.2%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	121.8	244.9	123.2	101.2%

1

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Service	9,485.3	17,703.9	8,218.6	86.6%
Material & Supplies	57.3	57.3	0.0	0.0%
Working Cash - Lead-Lag	12.2	65.5	53.3	436.2%
Amt withheld from Employees	(1.1)	(1.1)	0.0	0.0%
Wtd. Avg. Depr. Reserve	(4,578.7)	(4,596.0)	(17.3)	0.4%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	184.2	184.2	0.0	0.0%
Contributions	571.2	2,477.3	1,906.1	333.7%
Reserved Amort.Intangibles	69.8	88.7	18.9	27.1%
Deferred Taxes	739.9	739.9	0.0	0.0%
Unamortized ITC	16.4	16.4	0.0	0.0%
General Office Alloc	202.3	335.4	133.1	65.8%
Taxes on - Advances	16.7	16.7	0.0	0.0%
Taxes on - CIAC	34.2	34.2	0.0	0.0%
Average Rate Base	3,646.7	10,109.5	6,462.8	177.2%
Interest Calculation:				
Avg Rate Base	3,646.7	9,987.8	6,341.1	173.9%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	115.2	315.6	200.4	173.9%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	115.2	315.6	200.4	173.9%

1

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
MARYSVILLE DISTRICT

NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	0.37349%	0.37349%
2) 1-Uncoll (100%-line 1)	99.62651%	99.62651%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	0.37349%	0.37349%
8) 1-Subtotal (100%-line 7)	99.62651%	99.62651%
9) CCFT (line 8 * 8.84%)	8.80698%	8.80698%
10) Domestic Production Activities Deduction *	8.17376%	8.96639%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	28.92602%	28.64860%
12) Total taxes paid (ln 7+ln 9+ln 10)	38.10649%	37.82907%
13) Net after taxes (1-line 11)	61.89351%	62.17093%
<hr/>		
Net-to-Gross Multiplier (1/line 12) =	1.61568 (DRA)	
Net-to-Gross Multiplier (1/line 12) =	1.60847 (Utility)	

* DRA - Line 8 minus Line 9 multiplied by 9% multiplied by percentage of Qualified Activities
CWS - only multiplies Line 8 by 9%

This net-to-gross multiplier is to be used for changes in net revenue attributable to rate of return changes only and not to be used for rate base offsets. The net-to-gross for rate base offsets is much lower because the interest payments for the debt portion of rate base increase is tax deductible.

1 **CHAPTER 10: CUSTOMER SERVICE**

2 **A. INTRODUCTION**

3 DRA has reviewed California Water Service Company’s (“CWS”) filing,
4 responses to DRA data requests, and data obtained from the Commission’s
5 Consumer Affairs Branch regarding customer complaints in the Marysville
6 District.

7 **B. SUMMARY OF RECOMMENDATIONS**

8 DRA finds CWS’ customer service record satisfactory and the customer
9 service process reasonable.

10 **C. DISCUSSION**

11 **1) Customer calls and complaints**

12 The customer service representatives (CSR) in the district office handle all
13 customer complaint calls. When a customer calls the district office, the CSR logs
14 the date and time of the call along with a description of the complaint into the
15 Customer Service Information system. The majority of customer complaints are
16 resolved the same day they are received. Billing questions make up a large portion
17 of the calls received by the district office. The CSR tries to resolve the billing
18 issue directly. However, if a resolution can not be reached, the Customer Services
19 Manager in each district is empowered to make billing adjustments as needed.

20 All customer complaints filed with the Commission are sent to the CWS
21 rates department and follow a different procedure than described above. The rates
22 department contacts the district office to inform them of the complaint with the
23 goal of resolving the issue within 7 days. The district office researches the
24 complaint, contacts the customer to inform them of the investigations findings and
25 works to reach a resolution. Then the district office submits its findings and
26 resolution to CWS’ rates department for review. CWS’ rates department then

1 contacts the Commission's Division of Water and Audits or the Consumer Affairs
2 branch to present the complaint findings. There have been no complaints filed by
3 customers with the Commission since the last GRC.

4 **2) Water Quality complaints**

5 CWS' records indicate that the number of water quality complaints have
6 been low relative to the number of customers in the Marysville District. An
7 effective system is in place to receive and record customer complaints concerning
8 water quality. Customer complaints regarding taste and odor are handled by a CSR
9 who explains to the customer why those types of conditions occur. Other types of
10 complaints, such as low pressure or the presence of sand in the water, require a
11 serviceman to go out to the premises and investigate the complaint. When a
12 service call is required, the CSR notifies the maintenance department. CWS
13 assigns personnel to investigate the problem, notify the customer, and resolve the
14 issue. The majority of these complaints are resolved by inspecting the premises.
15 CWS tracks all water quality complaints in their system and records them on a
16 monthly summary report.

17 Table 10-A shows water quality customer complaint data for the last three
18 years. There are six categories for the different kinds of water quality complaints.
19 These categories are defined as:

- 20 • Air - can be trapped in water causing a milky appearance which goes
21 away when allowed to stand and the air goes to the surface;
- 22 • Dirty - can be discolored water or sand in the water from mainline
23 flushing or a main break in the area;
- 24 • Noise - can be associated with the water system, such as wells
25 turning on, or the customer's internal plumbing;
- 26 • Pressure - can be too high or too low; and

- Taste or odor - can be stronger than usual from chlorine, or a musty odor the customer is not accustomed to.

Table 10-A

Marysville District Customer Water Quality Complaints			
<u>Type</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Air	0	0	0
Dirty water	2	4	2
Noise	1	0	0
Pressure	5	7	5
Sand	0	2	0
Taste/Odor	4	4	1
Total	12	17	8
Number of Customers	3,729	3,718	3,696
Total as % of Customers	0.3%	0.5%	0.2%

Water Quality customer complaints are low compared to the number of customers in this district. The number of complaints in 2008 are one half the number of complaints in 2007. CWS is aggressively addressing these complaints and DRA finds this to be acceptable.

D. CONCLUSION

DRA recommends the Commission find CWS' customer service to be acceptable.

CHAPTER 11: RATE DESIGN

A. INTRODUCTION

In this GRC application (09-07-001), CWS requested changes to the non-residential rate design in Special Request #6, and requested changes to the residential rate design in Special Request #11. Thus, the scope of this chapter is limited to recommendations regarding:

- 1) The Water Revenue Adjustment Mechanism and Modified Cost Balancing Accounts (“WRAM/MCBA”),⁶⁵
- 2) Impacts of the conservation rate designs to date
- 3) Impacts on Low Income customer disconnections, and
- 4) Low income rate assistance surcharges

B. SUMMARY OF RECOMMENDATIONS

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

DRA recommends that the Commission require CWS to modify the WRAM/MCBA so that it does not disproportionately disadvantage ratepayers compared to shareholders. The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that if there are reductions in consumption, ratepayers and shareholders should split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA surcredits should be a flat amount applied to the service charge

When there is a combined over-collection in the WRAM/MCBA, the over-collection should be passed on to ratepayers through a flat surcredit on the service

⁶⁵ Other than recommendations regarding WRAM/MCBA in DRA’s special request chapters.

1 charge. This change to the surcredit mechanism will ensure that water-conserving
2 customers who use less water do not receive less surcredit than customers who use
3 large quantities of water. This will enhance the conservation price signal.

4 **2) Not Yet Enough Data to Determine Impacts of Conservation Rate**
5 **Designs**

6 This GRC application from CWS contains six months of consumption data
7 after CWS implemented the rate design and WRAM/MCBA mechanism Trial
8 Programs. Six months of consumption data is not long enough to draw
9 conclusions about the impacts of the conservation rate designs. The Commission
10 should evaluate the impacts of the conservation rate designs in CWS' next GRC.

11 **3) The Commission should require CWS to monitor disconnections by**
12 **month and communicate payment options to customers**

13 The Commission should require CWS to continue to track the number of
14 residential and LIRA customer disconnections per month. If the number of
15 disconnections has increased, CWS should develop a low-cost customer
16 communication plan to reduce the number of disconnections. In particular, CWS
17 should place messaging in customers' bills and on its website explaining to
18 customers the options that are available to them if they cannot pay their bills.

1 **4) The Commission should authorize CWS to increase the surcharge**
2 **for the low-income rate assistance program as necessary to continue**
3 **to provide the benefit to qualifying customers**

4 CWS states that it proposed to increase the surcharge to fund the low-
5 income rate assistance (“LIRA”) program.⁶⁶ DRA supports an increase in the
6 surcharge to support the forecasted participation levels in the LIRA program.

7 **C. DISCUSSION**

8 **1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the**
9 **Full Burden of the Economic Downturn**

10 When the Commission adopted the WRAM/MCBA decoupling mechanism
11 for CWS, the concept of the mechanism was to ensure a proportional impact on
12 the utility and ratepayers when CWS implemented conservation rates. DRA’s
13 settlement with CWS, adopted in D.08-02-036 states:

14 “Parties agree that the desired outcome and purpose of using
15 WRAMs and MCBAs is to ensure that the utility and
16 ratepayers are proportionally affected when conservation
17 rates are implemented.

18 a. In the context of this agreement, a proportional impact
19 means that, if consumption is over or under the
20 forecasted level, the effect on either the utility or
21 ratepayers (as a whole) should reflect that the costs or
22 savings resulting from changes in consumption will be
23 accounted for in a way such that neither the utility or
24 ratepayers are harmed, or benefit, at the expense of the
25 other party.”⁶⁷

26 Since it is too early to evaluate quantitative usage data on the impacts of the
27 conservation rate designs,⁶⁸ it is difficult to determine how much sales have

⁶⁶ Report on the Results of Operation, July 1, 2009.

⁶⁷ Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

⁶⁸ At the time CWS filed this GRC, there were only six months of usage data after implementation of the WRAM/MCBA and rate design Trial Programs, and CWS did not provide an analysis of this usage information to determine whether the utility and ratepayers are
(continued on next page)

1 decreased due to the effects of conservation oriented rates. But it is unreasonable
2 to assume that all recorded decrease in sales was entirely due to conservation
3 oriented rates and conservation programming, as it is certain that some portion of
4 the decrease was due to the economic downturn and other factors. Yet, as a result
5 of the WRAM/MCBA, ratepayers are currently bearing the full cost of the
6 economic downturn. This issue must be addressed immediately. Therefore, until
7 the impacts of conservation efforts can be better quantified, DRA recommends
8 that the Commission modify the WRAM so that if there are reductions in
9 consumption, rather than ratepayers being required to pay the full difference
10 between the authorized quantity revenue and actual quantity revenue, ratepayers
11 and shareholders split this difference equally. This will ensure that ratepayers and
12 shareholders are proportionally affected under the WRAM/MCBA decoupling
13 mechanism, when conservation rates are implemented in accordance with the
14 settlement.⁶⁹

15 This issue should be examined in the next GRC, when over three years of
16 consumption information will be available after the implementation of the
17 WRAM/MCBAs and conservation rates. However, it is clear at this time that the
18 WRAM/MCBA mechanisms have led to an unintended consequence: the WRAM
19 shields shareholders from all financial consequences of the severe economic
20 downturn, while ratepayers bear the full cost of the economic downturn. This is
21 an unintended consequence of the WRAM/MCBA trial program, not one of the
22 goals of the program.⁷⁰

(continued from previous page)

proportionally affected when conservation rates were implemented.

⁶⁹ Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

⁷⁰ The goals of the WRAM/MCBA mechanism trial program were three-fold:

a)“Sever the relationship between sales and revenue to remove any disincentive for the utility to implement conservation rates and conservation programs

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1 While there is not currently a method available to apportion reductions in
2 usage to each different cause – such as conservation and changes in economic
3 conditions, it is clear that there are different factors that can affect water usage and
4 each of them contribute to usage reductions. This is contrary to the
5 WRAM/MCBA, which compensates CWS for all of the reductions in
6 consumption, not just usage reductions from conservation. The Commission
7 should modify the WRAM/MCBA mechanism so that it does not
8 disproportionately disadvantage ratepayers compared to shareholders.

9 Further, the Commission specifically addressed the possible impact of a
10 WRAM/MCBA for California American Water Company during an economic
11 downturn in decision 08-06-002, p. 16, which stated:

12 “One disparate impact that could occur in the Pilot
13 Program period would be a severe economic downturn
14 in one or more of the Los Angeles service areas that
15 causes a significant decrease in revenues. This could
16 occur from a high rate of home foreclosures and/or
17 business slowdowns or shutdowns. We find this would
18 clearly be a disparate impact as the WRAM mechanism
19 would shield shareholders from all financial
20 consequences of the economic downturn while
21 requiring ratepayers to bear the full cost. Since Cal-Am
22 will be tracking sales levels by customer class and
23 service area, any disparate impact can be quickly seen
24 and addressed.”

25 CWS tracks sales levels by customer class and service area; and it is
26 possible to calculate and graph changes in consumption in different classes and
27 service areas. However, it is much more complex to determine or even speculate
28 about the reasons for the changes in consumption. Especially because of the

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b)Ensure cost savings resulting from conservation are passed on to ratepayers.

c)Reduce overall water consumption by Cal Water ratepayers.” (see the Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 8, section VI.1. Filed June 15, 2007, adopted in Decision 08-02-036).

1 significant economic downturn in recent years, that happens to coincide with
2 implementation of increasing block rates, makes it difficult to draw conclusions
3 about the reasons for any changing consumption patterns. Also, all CWS' districts
4 undercollected revenue in the WRAM account during July – December 2008,
5 except Bakersfield, King City, and Palos Verdes.⁷¹ This is an indication that sales
6 were lower than forecasted for almost all districts during this timeframe.

7 The WRAM should no longer require ratepayers to pay the full difference
8 between the authorized quantity revenue and actual quantity revenue. The
9 Commission should modify the WRAM/MCBA so that ratepayers and
10 shareholders split this difference equally. This will ensure that ratepayers and
11 shareholders are proportionally affected when conservation rates are implemented.

12 **1) b. WRAM/MCBA Surcredits Should Be a Flat Amount**
13 **Applied to the Service Charge**

14 When there is a combined under-collection in the WRAM/MCBA, this
15 should be recovered from ratepayers through volumetric surcharges, in accordance
16 with Decision 08-02-036. This maintains the conservation price signals of the
17 surcharge because customers who use more water pay a larger portion of the
18 surcharge. However, when there is a combined over-collection in the
19 WRAM/MCBA, this should be passed on to ratepayers through a flat surcredit on
20 the service charge. This change to the surcredit mechanism will ensure that water-
21 conserving customers who use less water do not receive less surcredit than
22 customers who use large quantities of water. Furthermore, this will also enhance
23 the conservation price signal.

24 This recommendation is important in light of the first six months of
25 WRAM/MCBA and Rate Design Trial Program implementation where the over
26 and under-collections in the net balance of the WRAM/MCBA typically were far

⁷¹ CWS WRAM/MCBA report to the Division of Water and Audits, March 2009

greater than the 2.5%⁷² trigger. In fact these balances were 10% or greater in seven districts, and were between 5% and 10% in another seven districts.⁷³

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

DRA and CWS reached a settlement agreement on rate design and revenue decoupling on April 23, 2007, and amended the settlement on June 15, 2007. The Commission ultimately adopted the settlement on February 28, 2008 in decision 08-02-036, and CWS had 90 days after the Commission decision adopting the settlement before the Trial Program became effective. CWS implemented the Trial Program, including the WRAM/MCBAs and conservation rate designs, via Advice Letter 1855, which became effective on July 1, 2008. CWS filed this GRC application in July 2009, and included data through December 2008. Thus, this GRC contains six months of consumption data after CWS implemented the WRAM/MCBA mechanisms. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs.⁷⁴

3) CWS should track low income disconnections on a monthly basis and provide this information in its annual report to the Commission on the WRAM/MCBA balances

Ordering Paragraph 6 from the Phase 1A Decision 08-02-036 from the conservation OII (I.07-01-022) (“OP6”) requires CWS to provide data related to the implementation of the conservation rate design trial programs. Specifically, OP6 states:

“6. Suburban, Park, and CalWater shall provide the following information in their next general rate case: monthly or bimonthly (depending upon the billing

⁷² The trigger is “2.5% of the district’s total recorded revenue requirement for the prior calendar year” (see Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, Section IX 3) d., Filed June 15, 2007, adopted in Decision 08-02-036.

⁷³ See CWS WRAM/MCBA report to the Division of Water and Audits, March 2009.

⁷⁴ See Special Request #11 for further discussion.

1 cycle) ... increase or decrease in disconnecting low-
2 income program participants for nonpayment by
3 district after adoption of conservation rate designs;
4 increase or decrease in low-income program
5 participation by district after adoption of conservation
6 rate designs; increase or decrease in residential
7 disconnections for nonpayment by district after
8 adoption of conservation rate designs....”
9

10 In this GRC application, CWS provided some of the information required
11 in this Ordering Paragraph.⁷⁵ In particular, CWS provided information on
12 customer disconnections for both residential and LIRA customer groups for the
13 first six months of Trial Program implementation between July 1, 2008 and
14 December 31, 2008. However, this data incorrectly “double-counted” low income
15 customer disconnections.⁷⁶ CWS provided corrected data for July 2008 through
16 July 2009. However, CWS did not yet provide information about customer
17 disconnections prior to July 2008.⁷⁷ In order for the Commission to assess the
18 “increase or decrease” in low-income disconnections when CWS implemented the
19 conservation rate design and WRAM/MCBA Trial Programs, pursuant to the
20 above Ordering Paragraph, data on customer disconnections from before and after
21 the implementation of the conservation rate designs must be compared. Since
22 CWS only provided information from after the implementation of conservation

⁷⁵ Prepared Testimony of David Morse, p. 28 – 31.

⁷⁶ Email from CWS (Tu Rash), on 1/13/2010, states regarding the query Cal Water originally ran for Dave Morse “in effect that query double counted the number of LIRA customers.”

⁷⁷ DRA requested information on residential and LIRA customer disconnections from July 2007 through July 2009 in LWA-5 on 12/22/09, and CWS provided an initial response on 12/31/09, but it did not correspond to the numbers in David Morse’ testimony, so CWS provided a revised response on 1/5/2010, but this still did not correspond to the numbers in David Morse’ testimony. CWS provided a further revised response on 1/13/2010, but this only provided data from 2008-2009. At the time DRA had to finalize this testimony, it had not yet received final numbers for residential and LIRA customer disconnections from July 2007 through 2009, although DRA is confident CWS would have provided the information to comply with this ordering paragraph had there been unlimited time.

1 rate designs, this is not in compliance with OP 6. DRA believes CWS intended to
2 provide the correct information and CWS should provide this information in its
3 rebuttal testimony so that the Commission can consider it in this proceeding.

4 On a going forward basis, the Commission should require CWS to continue
5 to track the number of residential and LIRA customer disconnections per month
6 and report this information in the annual report that CWS submits to the
7 Commission by March 31 each year regarding WRAM/MCBA balances.⁷⁸ If the
8 number of disconnections has increased, CWS should develop and implement a
9 low-cost customer communication plan to reduce the number of disconnections.
10 In particular, CWS should place messaging on customer bills and on CWS'
11 website explaining to customers the options that are available to them if they
12 cannot pay their bills. For example, PG&E has a message on its website that says:

13 "We Know Times Are Tough.
14 If you or someone you know is having trouble paying
15 your bill, we can help. Please call us today at 1-800-
16 743-5000 so we can discuss program options and
17 payment arrangements that work for you."⁷⁹

18 Another example is San Diego Gas and Electric Company,
19 which has messaging on its website that provides a rotational link to
20 "Need Extra Help With Your Bill? Learn about available assistance"
21 and "Get extra help with your bill."⁸⁰

22 **4) The Commission should authorize CWS to increase the**
23 **surcharge for the low-income rate assistance program as**
24 **necessary to continue the benefit for qualifying customers**

⁷⁸ Pursuant to "Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues," section IX 3), Filed June 15, 2007, adopted in Decision 08-02-036.

⁷⁹ <http://www.pge.com/myhome/> (accessed 1/28/2010).

⁸⁰ <http://www.sdge.com/index/> (accessed 1/28/2010).

1 CWS states that it proposed to increase the surcharge to fund the low-
2 income rate assistance (“LIRA”) program.⁸¹ The Commission authorized the
3 LIRA program in D.06-11-053, and it provides a 50% discount on the service
4 charge to qualifying households. DRA supports the continuation of the LIRA
5 program as authorized in D.06-11-053. To the extent that an increase in the
6 surcharge is necessary to support the LIRA program at forecasted participation
7 levels, the Commission should authorize the increase in the surcharge. DRA notes
8 that this surcharge is combined with the surcharge for the Rate Support Fund
9 (“RSF”) and that CWS’ requested increase from \$0.009 to \$0.015 per ccf⁸² also
10 includes the additional funding to support CWS’ increases in the RSF subsidies.
11 For this reason, the required increase in the surcharge to support only the LIRA
12 program should be lower than \$0.015 per ccf and should be calculated based upon
13 the final revenue requirement in this case as well as the adopted rate of
14 participation in the LIRA program.

15 **D. CONCLUSION**

16 The Commission should adopt the recommendations on rate design and
17 revenue decoupling included in this chapter.

⁸¹ Report on the Results of Operation, July 1, 2009, Chapter 12 “Present and Requested Tariffs” states that customers pay a surcharge of \$0.009 per Ccf to fund the program and that CWS proposes to increase the surcharge to \$0.015 per Ccf.

⁸² Additional Prepared Testimony of Thomas Smegal, Special Request 11, p. 15, lines 21-22.

CHAPTER 12: WATER QUALITY

A. INTRODUCTION

The Rate Case Plan requires water utilities to submit information about water quality in their GRC applications. This Chapter presents DRA's review of water quality submittals by California Water Service Company ("CWS") for the Marysville District and CWS' response to DRA's data request.

The California Department of Public Health ("CDPH") is the primary agency responsible for ensuring that the water provided to the public by the District is safe for consumption. DRA reviewed the most recent CDPH inspection report, the District's response to the report, and the CDPH's response to DRA's inquiry on the District's water quality issues and compliance status.

B. SUMMARY OF RECOMMENDATIONS

Based upon the information provided by the company and by the CDPH, CWS' Marysville District appears to be in compliance with all applicable water quality standards and requirements. Exceptions if any are noted below.

C. DISCUSSION

The Marysville district has seven active groundwater wells. The District has not exceeded any primary or secondary Maximum Contaminant Levels ("MCLs") since the last general rate review. CWS reports that the district has several water quality issues including methyl tertiary-butyl ether ("MtBE"), manganese and arsenic.

MtBE and manganese - MtBE contamination caused the District to shut down Well 3-01. Due to the high MtBE concentration, age and condition of this

1 well, the CDPH has recommended this well be destroyed.⁸³ Well 10-01 is also
2 contaminated with MtBE, as well as iron and manganese. CWS has placed this
3 well on standby status because pumping causes the MtBE plume to migrate toward
4 the well.⁸⁴ CWS is planning for ATEC iron and manganese treatment and
5 Granular Activated Carbon treatment for MtBE at this well.⁸⁵

6 Arsenic - The District has four active wells and one standby well with
7 arsenic levels around 5 ug/L and stable; no treatment is being planned.⁸⁶ For Well
8 15-01 with arsenic levels at around 6-8 ug/L and slowly increasing, CWS reports
9 that it would treat this well using ferric chloride if it exceeds the arsenic MCL of
10 10 ug/L.

11 The CDPH issued its most recent Annual Inspection Report on
12 March 3, 2008; no deficiencies were noted. The CDPH, in response to DRA's
13 inquiry, confirms that the District is in compliance with all applicable water
14 standards.⁸⁷

15 **D. CONCLUSION**

16 Based on the information reviewed, it appears that CWS' Marysville
17 District is in compliance with all applicable water quality standards and
18 requirements and is addressing issues raised by the CDPH.

⁸³ CWS' response to DRA's data request PPM-001, Item 9.a.

⁸⁴ Testimony of Chet Auckly (Water Quality), page 30.

⁸⁵ CWS' response to DRA's data request PPM-001, Item 9.a.

⁸⁶ CWS' response to DRA's data request PPM-001, Item 9.e.

⁸⁷ November 30, 2009 email from Richard Hinrichs of CDPH to DRA.

1 **CHAPTER 13: STEP RATE INCREASE**

2 **A. FIRST ESCALATION YEAR**

3 On or after November 1, 2011, the Commission shall authorize CWS to file
4 a Tier 1 advice letter, with appropriate supporting workpapers, requesting the step
5 rate increase for 2012 or to file a lesser increase in the event that the rate of return
6 on rate base, adjusted to reflect the rates then in effect and normal ratemaking
7 adjustments for the 12 months ending September 30, 2011, exceeds the lesser of
8 (a) the rate of return found reasonable by the Commission for CWS for the
9 corresponding period in the most recent rate decision or (b) the rate of return
10 found reasonable in this case. This filing should comply with General Order 96-B.

11 The Commission's Water Division ("Water Division") should review the
12 requested step rates to determine their conformity with this order, and the
13 requested step rates should go into effect upon the Water Division's determination
14 of compliance. The Water Division should inform the Commission if it finds that
15 the proposed rates do not comply with this Decision. The Commission may then
16 modify the increase. The effective date of the revised tariff schedule should be no
17 earlier than January 1, 2012. The revised schedules should apply to service
18 rendered on and after their effective date. Should a rate decrease be in order, the
19 rates should become effective on the filing date.

20 **B. SECOND ESCALATION YEAR**

21 For the second year, the Commission should grant an attrition adjustment
22 for the revenue requirement increases attributable to expense increases due to
23 inflation and rate base increases that are not offset by revenue increases. The
24 revenue changes shall be calculated by multiplying forecasted inflation rate and
25 operational attrition plus financial attrition times adopted rate base in 2012 times
26 the net-to-gross multiplier.

C. ESCALATION YEARS INCREASES

The table below shows the Summaries of Earnings for Escalation Years 2012 and 2013. To obtain the increases in these years, D. 04-06-018 and D. 07-05-062 require water utilities to file an Advice Letter 45 days prior to the start of the year showing all calculations supporting their requested increases.

The revenues shown in Table 13-1 are for illustration purposes and the actual increases would be authorized only after approval of the utility's advice letter.

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY MARYSVILLE DISTRICT

	DRA 2011	DRA 2012	% increase	
Item	(Thousands of \$)			
Operating revenues	2,591.2	2,616.6	1.0%	Esc. Factor
Operation & Maintenance	831.5	853.1	2.6%	1.026
Administrative & General	466.9	478.1	2.4%	1.024
G.O. Prorated Expense	424.3	435.3	2.6%	1.026
Depreciation & Amortization	309.0	317.0	2.6%	1.026
Taxes other than income	76.8	78.8	2.6%	1.026
State Corp. Franchise Tax	25.8	23.3	-9.8%	
Federal Income Tax	144.0	135.7	-5.8%	
Total operating expenses	2,278.3	2,321.4	1.9%	
Net operating revenue	312.9	295.2	-5.7%	
Rate base	3,646.7	3,440.2	-5.7%	
Return on rate base	8.58%	8.58%	0.0%	

APPENDIX A

QUALIFICATIONS AND PREPARED TESTIMONY

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
PATRICK E. HOGLUND**

Q1. Please state your name and business address.

A1. My name is Patrick E. Hoglund. My business address is 505 Van Ness Avenue, San Francisco, California.

Q2. By whom are you employed and in what capacity?

A2. I am employed by the California Public Utilities Commission – Division of Ratepayer Advocates (DRA) Water Branch - as a Senior Utilities Engineer.

Q3. Please briefly describe your educational background and work experience.

A3. I am a graduate of the University of California, Berkeley, with a Bachelor of Science Degree in Industrial Engineering and Operations Research. I am also a graduate of the University of Rochester, William E. Simon School of Business with a Master of Business Administration Degree with concentrations in Finance and Corporate Accounting. I am a licensed professional Industrial Engineer.

I have been employed by the California Public Utilities Commission since 2005. Currently I work on Class A water General Rate Cases. From July 1999 through August 2004, I was a Senior Rates Analyst at Pacific Gas and Electric Company, where I worked on a variety of revenue requirements issues related to natural gas. From 1990 through 1997, I was employed by the California Public Utilities Commission. During this time I worked on small water utility rate cases, large water utility rates cases, and also worked in the Telecommunications and Energy Branches of the former Commission Advisory and Compliance Division, as well as in DRA.

Q4. What are your responsibilities in this proceeding?

A4. I am the Co-Project Manager for this proceeding with overall responsibility for twelve CWS Districts: Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, Oroville, Redwood Valley, South San Francisco, Stockton, and Willows. I am also responsible for the Executive Summary, Chapter 1-Overview and Policy, and Chapter 13-Step Rate Increase of the district reports.

Q5. Does this conclude your prepared testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
LISA BILIR**

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A.1 My name is Lisa Bilir and my business address is 505 Van Ness Avenue, San Francisco, California, 94102. I am a Public Utilities Regulatory Analyst V in the Water Branch of the Division of Ratepayer Advocates.

Q.2 Please summarize your education background and professional experience.

A.2 I received my Bachelor of Science degree in Biological Sciences from Stanford University in 2001 and a Master of Public Policy from The Goldman School of Public Policy at U.C. Berkeley in 2007.

From August 2006 to June 2007 I worked in the Water Branch of DRA as a graduate student intern. I have been a full-time staff member in DRA since October 2007. Since then I completed a settlement with California-American Water's (CAW) Los Angeles district and the City of Duarte on conservation rate design and revenue decoupling issues. I was DRA's project manager for CAW's conservation application for the Monterey District, where I completed settlements with CAW and Monterey Peninsula Water Management District on conservation programs and plans. I also submitted testimony in CAW's Monterey District GRC regarding conservation rate design and revenue decoupling issues and reached a settlement on that issue. In addition, I completed a settlement with San Gabriel Valley Water Company (SGVWC) in May 2008 regarding an interim budget and funding mechanism for conservation programs in its Fontana Water Company Division. I am DRA's project manager for SGVWC's conservation application A.08-09-008 and submitted testimony regarding rate design, revenue decoupling and reporting requirements in that proceeding.

Q.3 What is your responsibility in this proceeding?

A.3 I am responsible for the chapters on Rate Design, and Special Requests 1, 6, 11, 12, 13, 15, and 29 and I am a co-author for the chapters on Revenue and Special Request #28. For the Revenue chapters, I am primarily responsible for the number of customer and revenue calculations; for the Special Request #28, I am responsible for the portion of the chapter other than the Introduction and discussion of an OIR.

Q.4 Does this conclude your prepared direct testimony?

A.4 Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
ZACHARY BURT**

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A.1 My name is Zachary Burt and my business address is 505 Van Ness Avenue, San Francisco, CA 94102. I am an intern in the Water Branch of the Division of Ratepayer Advocates.

Q.2 Please summarize your education background and professional experience.

A.2 I received a dual bachelor's degree in Economics and Chemistry from the University of California at Berkeley in 2001. I received a Master's of Science from the Energy and Resources Group at U.C. Berkeley in May, 2009, and am continuing on to pursue a PhD in the same program as of Fall 2009. My program of study focuses on the economics of water, including demand management, conservation pricing and water services treatment and provision. In DRA, I analyzed and made recommendations on Golden State Water Company's conservation rate designs and reached a settlement with Golden State Water Company in that case. I also wrote testimony and testified orally on San Gabriel Valley Water Company's conservation rate design proposals.

Q.3 What is your responsibility in this proceeding?

A.3 I am a co-author of Chapter 2 on Revenues, and am primarily responsible for the sections regarding sales forecasts.

Q.4 Does this conclude your prepared direct testimony?

A.4 Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
RAYMOND YIN**

- Q1. Please state your name, business address, and position with the California Public Utilities Commission (The “Commission”).
- A1. My name is Raymond Yin and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Public Utilities Financial Examiner in the Water Branch of the Division of Ratepayer Advocates.
- Q2. Please summarize your education background and professional experience.
- A2. I graduated from San Francisco State University, with a Bachelor of Science Degree in Accounting. I am a Certified Public Accountant in the State of California. I have been employed by the Commission since January 2008. Previously I was employed by the California State Department of Health Care Services. I have been a tax witness on the following Class A water utilities’ General Rate Cases: Suburban Water Systems, Park Water Company, San Jose Water Company, and California American Water Company.
- Q3. What is your responsibility in this proceeding?
- A3. I am a witness for this proceeding and responsible for Chapter 3 –Operation and Maintenance Expenses for the following districts: Chico, Dixon, Marysville, Oroville, Redwood Valley, Stockton, and Willows.
- Q4. Does this conclude your prepared direct testimony?
- A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
CLEASON D. WILLIS**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Cleason D. Willis and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Regulator Analyst in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I graduated from the California State University of Hayward with a Bachelor of Science Degree in Business Administration and Finance, and a Masters of Science Degree in Public Administration and Management. After graduation I joined the California Public Utilities Commission. Since that time I have performed economic and reasonableness analysis for various electrical, gas, water, and telecommunications operations. I have written reports and testified regarding the validity of my findings and recommendations concerning my analysis for various utility proceedings.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for Chapter 4 - Administrative and General Expenses for the following California Water Service Company's northern districts: Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, Oroville, Redwood Valley, South San Francisco, Stockton, and Willows.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
K. JERRY OH**

- Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).
- A1. My name is K. Jerry Oh and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Financial Examiner IV in the Water Branch of the Division of Ratepayer Advocates.
- Q2. Please summarize your education background.
- A2. I graduated from the University of California at Los Angeles, with a Bachelor of Arts in Business Economics.
- Q3. Briefly describe your professional experience.
- A3. I have been employed by the Commission since February 2000. While at the CPUC, I have conducted audits of water and energy utilities, managed contract auditors, and reviewed energy procurement costs. For the past three years, I have worked on different areas of a water utility's GRC.
- Q4. What is your responsibility in this proceeding?
- A4. I am responsible for review of the Affiliate Transaction of CWS, General Office Cost Allocation, Taxes for the Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, South San Francisco, Oroville, Redwood Valley - Coast Springs, Redwood Valley - Lucerne, Redwood Valley - Unified, Stockton, and Willows districts, and Special Request 3.
- Q5. Does this conclude your prepared direct testimony?
- A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
ISAIAH LARSEN**

Q1. Please state your name, business address and position with the California Public Utilities Commission (Commission).

A1. My name is Isaiah Larsen. My business address is 505 Van Ness Avenue, San Francisco, California 94102. My job title is Utilities Engineer and I work in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your educational background and work experience.

A2. In December 2007, I completed my M.S. in Environmental Engineering at the University of California, Berkeley. My undergraduate degree is in Materials Science and Engineering from the University of California, Los Angeles.

I have been employed as a student intern at both Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories in Livermore, CA. While at LLNL, I designed and fabricated micro-fluidic hydrogen fuel cells for portable power applications.

As a graduate student intern with the Water Branch, my work included a settlement between DRA and Del Oro Water Company on the Regional Intertie Project. I have been a full-time staff member of DRA since July 2008. I have prepared written and oral testimony for the following proceedings: the conservation and rationing programs in Phase 2 of Cal Am's Conservation A.07-12-010, unaccounted for water in Cal Am's Monterey GRC, A.08-01-027, and utility plant in service and conservation for the SJWC GRC, A.09-01-009.

Q3. What is your responsibility in this proceeding?

A3. I am the witness responsible for Utility Plant in Service testimony for Willows, Marysville, Redwood Valley, Dixon, Stockton, Livermore, Bear Gulch, Los Altos, Mid-Peninsula, and South San Francisco. I am responsible for Depreciation, Working Cash and Lead-Lag testimony for these districts. I am also responsible for Special Request 20.

Q4. Does that complete your prepared direct testimony in this proceeding?

A4. Yes.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
RICHARD RAUSCHMEIER**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Richard Rauschmeier and my business address is 505 Van Ness Avenue, San Francisco, California. I am an Auditor in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your educational background.

A2. I graduated from The Johns Hopkins University with a Bachelor's degree in Environmental Science, concentrating in chemistry and water treatment. In 2000, I earned a Masters of Science from Purdue University. In 2008, I completed training and successful examination for certification as both a Water Treatment and Distribution Operator in California under the State's Department of Public Health.

Q3. Briefly describe your professional experience.

A3. For more than 10 years, I have worked as an employee or consultant assisting organizations develop efficient and effective business policies and practices. In December of 2008, I joined the California Public Utilities Commission as an Auditor.

Q4. What is your responsibility in this proceeding?

A4. I am sponsoring the calculation of Net-To-Gross Multipliers of all districts (see Chapter 9), as well as, DRA's testimony in Chapter 5 (Taxes Other Than Income) and Chapter 6 (Income Taxes) for the 12 districts (Antelope Valley, Bakersfield, Dominguez, East Los Angeles, Hermosa-Redondo, Kern River, King City, Palos Verdes, Salinas, Selma, Visalia, and Westlake).

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
PAT MA**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Pat Ma and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Utilities Engineer in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Science Degree in Industrial Engineering with a concentration in Management from San Jose State University in 1986. In December 2008, I rejoined the Commission as a Utilities Engineer in the DRA's Water Branch. My previous professional position was as a Senior Utilities Engineer at the Commission, where I worked from 1986 to 1999 in transportation, telecommunications, energy and water areas. I received my Professional Engineer License in Industrial Engineering in the State of California in 1989 and also worked briefly for the U.S. EPA, Region 9 as an Environmental Engineer in 1989.

Q3. What is your responsibility in this proceeding?

A3. I am a witness for this proceeding and responsible for Chapters 3 - Operations and Maintenance Expenses for California Water Service Company's Bear Gulch, Livermore, Los Altos, Mid Peninsula and South San Francisco districts and Chapter 12 - Water Quality for its twelve northern districts.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
TONI CANOVA**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Toni Canova and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utility Regulatory Analyst in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I graduated from The Evergreen State College in Olympia, Washington, with a Bachelor of Arts Degree in Environmental Studies. I have been employed by the Commission for over six years. I have testified before the Commission in General Rate Cases involving several Class A water utilities including California Water Service Company and Park Water Company. Previously, I was employed by the State of Washington's Department of Ecology for 10 years.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for testimony in Chapter 10 – Customer Service, and for the Result of Operations tables for the twelve northern districts.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.